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Sequence 1, Appli
Sequence 10, Appl
Sequence 10, Appli
Sequence 5, Appli
Sequence 7, Appli
Sequence 2, Appli
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Sequence 1, Appli
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Sequence 13, Appli
Sequence 646, Appli
                                                                                                                                                    November 1, 2004, 18:59:56 ; Search time 560 Seconds (without alignments) 9284.622 Million cell updates/sec
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/ Ggn2_6/ptodata/1/pubpna/PCT_NEW_PUB. seq:*
/ Ggn2_6/ptodata/1/pubpna/USO6_NEW_PUB. seq:*
/ Ggn2_6/ptodata/1/pubpna/USO6_NEW_PUB. seq:*
/ Ggn2_6/ptodata/1/pubpna/USO7_NEW_PUB. seq:*
/ Ggn2_6/ptodata/1/pubpna/USO8_NEW_PUB. seq:*
/ Ggn2_6/ptodata/1/pubpna/USO8_NEW_PUB. seq:*
/ Ggn2_6/ptodata/1/pubpna/USO8_PUBCOMB. seq:*
/ Ggn2_6/ptodata/1/pubpna/USO8_PUBCOMB. seq:*
/ Ggn2_6/ptodata/1/pubpna/USO8_PUBCOMB. seq:*
/ Ggn2_6/ptodata/1/pubpna/USO8_PUBCOMB. seq:*
/ Ggn2_6/ptodata/1/pubpna/USO9_PUBCOMB. seq:*
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/cgn2_6/ptodata/1/pubpna/US11_NEW_PUB.seq.*
/cgn2_6/ptodata/1/pubpna/US0_NEW_PUB.seq.*
/cgn2_6/ptodata/1/pubpna/US6_PUBGOMB.seq.*
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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0 US-09-885-453-2

4 US-10-270-144-1

4 US-10-188-405-7

5 US-10-079-384-13

5 US-10-225-567A-646
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US-10-298-141-10
US-10-296-081-10
US-10-763-854-1
US-10-023-634-5
US-10-055-569A-7
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Total number of hits satisfying chosen parameters:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         3413475 seqs, 2563800928 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SUMMARIES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Published Applications NA:*
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries
                                                                                                    OM nucleic - nucleic search, using sw model
                                                                                                                                                                                                                                                                                                                                                                                                       Gapop 10.0 , Gapext 1.0
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Maximum DB seq length: 200000000
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                                                                                                                                                                                                                                                                                                                        Sequence:
                                                                                                                                                                                                                                                                                                                                                                                                                                                         Searched:
                                                                                                                                                            Run on:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Result
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| Sequence 27, Appl | Sequence 5, Appli | H | 'n | Sequence 27, Appl | Н | Sequence 1, Appli | Sequence 525, App | Sequence 463, App | Sequence 3, Appli | Sequence 17, Appl | Sequence 85, Appl | Sequence 1, Appli | Sequence 1, Appli | Sequence 59, Appl | Sequence 40, Appl | Sequence 102, App | Sequence 4, Appli | Sequence 104, App | Sequence 218, App | Sequence 1, Appli | Sequence 1456, Ap | 35 | 37 | 35, | 35, | 37, | 37, | 35, | 566 | 36, | e 36, | Sequence 1352, Ap |
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| US-10-321-807-27 | US-10-344-728-5 | US-10-343-650A-13 | US-10-321-807-27 | US-10-314-048A-27 | US-10-010-568-1 | US-10-375-157-1 | US-10-017-161-525 | US-10-292-798-463 | US-10-270-144-3 | US-10-400-991-17 | US-09-782-974C-85 | US-09-943-798-1 | US-09-728-422-1 | US-09-782-974C-59 | US-09-812-102-40 | US-10-276-774-102 | US-10-344-728-4 | US-09-801-944B-104 | US-10-225-567A-218 | US-10-270-587-1 | US-10-305-720-1456 | US-09-875-076-35 | US-09-876-252-37 | US-10-272-983-35 | US-10-393-807-35 | US-10-417-820A-37 | US-10-723-955-37 | US-10-782-596-35 | US-10-225-567A-566 | US-09-764-886-36 | US-09-764-886-36 | US-10-264-237-1352 |
| 15 | 16 | 16 | 17 | 17 | 15 | 15 | 15 | 15 | 14 | 15 | 10 | 6 | 6 | 10 | 6 | 16 | 16 | :: | 15 | 14 | 16 | 10 | 10 | 15 | 15 | 15 | 17 | 17 | 15 | σ | 10 | 16 |
| 1014 | 1014 | 1014 | 1014 | 1014 | 1081 | 1081 | 1414 | 1414 | 9905 | 1729 | 1020 | 831 | 1313 | 578 | 526 | 545 | 2245 | 657 | 2424 | 1428 | 3055 | 1005 | 1005 | 1005 | 1005 | 1005 | 1005 | 1005 | 1380 | 1436 | 1436 | 1436 |
| 8.66 | 8.66 | 8.8 | 8.66 | 8.66 | 8.66 | 8.66 | 8.66 | 8.66 | 8.66 | 7.66 | 96.3 | 81.8 | 71.8 | 53.0 | 20.6 | 47.5 | 32.7 | 18.6 | 14.7 | 13.1 | 13.1 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 | 12.8 |
| 1012.4 | 1012.4 | 1012.4 | 1012.4 | 1012.4 | 1012.4 | 1012.4 | 1012.4 | 1012.4 | 1012.4 | 1010.8 | 976.2 | 829.4 | 728 | 537.2 | 513.4 | 481.4 | 332 | 189 | 148.6 | 132.8 | 132.6 | 129.6 | 129.6 | 129.6 | 129.6 | 129.6 | 129.6 | 129.6 | 129.6 | 129.6 | 129.6 | 129.6 |
| 13 | 14 | 12 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 56 | 27 | 28 | 59 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |
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ALIGNMENTS

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
                  Sequence 1, Application US/10023775B
Publication No. US20030022282A1
GENERAL INFORMATION:
APPLICANT: Fizer Ltd. (EP(GB) only)
APPLICANT: Pfizer Inc. (US, JP, EB except GB)
APPLICANT: Fidock, Mark David
TITLE OF INTENTION: No. US20030022282A1e1 Polypeptide
FILE REFERENCE: PC10959AGPR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .,
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CURRENT FILING DATE: 2001-12-18
PRIOR APPLICATION NUMBER: GB 0030854.4
PRIOR FILING DATE: 2000-12-18
PRIOR APPLICATION NUMBER: US 60/260,590
PRIOR FILING DATE: 2001-01-09
PRIOR FILING DATE: 2001-01-09
PRIOR FILING DATE: 2001-06-07
PRIOR FILING DATE: 2001-06-07
PRIOR FILING DATE: 2001-05-04
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 100.0%; Pred. ...
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SOFTWARE: PatentIn version 3.1
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Best Local Similarity 100.
Matches 1014; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: DNA
ORGANISM: Homo sapiens
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US-10-023-775B-1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; OKGANISM: DOI
US-10-023-775B-1
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LU, Yan TRIBOULEY, Catherine

THORNTON, Michael

GRAUL, Richard KHAN, Farrah A. GANDHI, Ameena R. WALIA, Narinder K. NGUYEN, Danniel B.

APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:
APPLICANT:

YUE, Henry HAFALIA, April ELLIOTT, Vicki S.

APPLICANT:
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APPLICANT:

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                TTTGGAAATTGCACTGATGAAAACATCCCACTCAAGATGCACTACCTCCCTGTTATTAT
                                                                         ATTITIGACTICCAACTACTITICTICCCCCTTICGTGATAGTGACACTITIGCTATACCACG
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TITIGGAAATIGGACTGAAAAAAATCATCCCACTCAAGAIGCACTACCTCCCTGTTATTTAT
                                                        GGCATTATCTTCCTCGTGGGATTTCCAGGCAATGCAGTAGTGATATCCACTTACATTTTC
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TYPE: DNA ORGANISM: Homo sapiens

LENGIH:

APPLICANT: LAL, Preeti
APPLICANT: LAL, Preeti
APPLICANT: REDDY, Roopa
APPLICANT: RALLICK, Deborah A.
APPLICANT: TANG, Y. Tom
APPLICANT: TANG, Y. Tom
APPLICANT: TANG, Y. Tom
APPLICANT: AU-YOUNG, Janice
TITLE OF INVENTION: G-PROTEIN COUPLED RECEPTORS
FILE REPERENCE: PI-0096 USA
CURRENT FILING DATE: 2000-06-02
PRIOR FILING DATE: 2000-06-02
PRIOR FILING DATE: 2000-06-02
PRIOR PLILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/208,834
PRIOR PLILING DATE: 2000-05-25
PRIOR PLILING DATE: 2000-05-18
PRIOR PLILING DATE: 2000-05-18
PRIOR PLILING DATE: 2000-05-18
PRIOR PLILING DATE: 2000-05-05
PRIOR PLILING DATE: 2000-06-02
PRIOR PLILING DATE: 2000-06-02
PRIOR FILING DATE: 2000-06-03

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240
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                                                                                                                                        1 ATGAATGAGCCACTAGACTATTTAGCAAATGCTTCTGATTTCCCCCGATTATGCAGCTGCT
                                                                                                        Gaps
                                                                     Length 1014;
                                                                                                        ;
0
; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No. US20030138818A1 6575963CB1
US-10-278-141-10
                                                                                                         0; Indels
                                                                     100.0%; Score 1014; DB 15;
100.0%; Pred. No. 5.3e-294;
ative 0; Mismatches 0;
                                                                                                         Matches 1014; Conservative
                                                                           Query Match
Best Local Similarity
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Sequence 10, Application US/10278141
Publication No. US20030138818A1
GENERAL INFORMATION:
APPLICANT: PATTERSON, Chandra
APPLICANT: LU, Dyung Aina M.

RESULT 2 US-10-278-141-10

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                                                                                                                       NAME/KEY: misc feature
; OTHER INFORMATION: Incyte ID No. US20030220477A1 6575963CB1
US-10-296-081-10
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       NOS: 16
                                                                        TYPE: DNA
ORGANISM: Homo sapiens
   NUMBER OF SEQ ID NOS: 1
SOFTWARE: PERL Program
SEQ ID NO 10
                                                    LENGTH: 1014
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APPLICANT: AU-YOUNG, Janice
TITLE OF INVENTION: G-PROTEIN COUPLED RECEPTORS
FILE REFERENCE: PI-0096 PCT
CURRENT APPLICATION NUMBER: US/10/296,081
CURRENT FILING DATE: 2002-11-18
PRIOR APPLICATION NUMBER: 60/205,628; 60/206,222; 60/207,566; 60/208,834; 60/208,861
PRIOR FILING DATE: 2000-05-18; 2000-05-22; 2000-05-25; 2000-06-02
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Publication No. US20030220477A1
GENERAL INFORMATION:
APPLICANT: INCYTE GENOMICS, INC.
APPLICANT: LU, Dyung Aina M.
APPLICANT: THORNTON, Michael
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TRIBOULEY, Catherine M.
GRAU, Richard
KHAN, Farrah A.
GANDHI, Ameena R.
WALLA, Narinder K.
NGUYEN, Danniel B.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              YUE, Henry
HAFALIA, April
ELLIOTT, Vicki S.
LAL, Preeti
REDDY, Roopa
KALLICK, Deborah A.
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APPLICANT: Millet, Isabelle
APPLICANT: Gerlach, Valerie
TITLE OF INVENTION: Proteins, Polynucleotides Encoding Them and Methods of
FILE OF INVENTION: Using the Same
FILE REFERENCE: 21402-221
661 ATTATCCACACTCTGACCCATGGACTGCAAACTGACAGCTGCCTTAAGCAGAAAGCACGA
                                                                                        481 TCACTGGTAGCTGTCATTCCGATGACCTTCTTGATCACCAACAACAGACCAACAGA
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Publication No. US20030236389A1
GENERAL INFORMATION:
APPLICANT: Shimkers, Richard A
APPLICANT: Solman, Steven D
APPLICANT: Spytek, Kimberly A
APPLICANT: Ballinger, Robert A
APPLICANT: Guo, Xiaojia
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Patturajan, Meera
Casman, Stacie J
Boldog, Ferenc
Gusev, Vladimir Y
Burgess, Catherine E
Edinger, Shlomit R
Gangolli, Bsha A
Malyankar, Uriel M
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Shenoy, Suresh G
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Ellerman, Karen
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                                                                        CTATATGTGGTCAGCGACAACTTTCAGCAGGCTGTCTGCTCAACAGTGAGATGCAAA 960
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                                                CTATATGTGGTGGTCAGCGACAACTTTCAGCAGGCTGTCTGCTCAACAGTGAGATGCAAA 960
    CATGAAGCTTACATCGTTTCTAGACCATTAGCTGCTCTGAACACCTTTGGTAACCTGTTA 900
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                                                                                                                                  GTAAGCGGGAACCTTGAGCAAGCAAAAATTAGTTACTCAAACAACCTTGA 1014
                                                                                                                                                          100.0%; Score 1014; DB 17; Length 1014; 100.0%; Pred. No. 5.3e-294; ive 0; Mismatches 0; Indels 0;
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PRIOR PELING DATE: 2000-12-18
PRIOR PELING DATE: 2000-12-18
PRIOR PELING DATE: 2001-12-18
PRIOR PILING DATE: 2001-12-18
PRIOR PILING DATE: 2001-06-07
PRIOR PLING DATE: 2001-06-07
PRIOR APPLICATION NUMBER: US 60/260,590
PRIOR PILING DATE: 2001-01-09
PRIOR PILING DATE: 2001-01-09
PRIOR PILING DATE: 2001-01-09
PRIOR PILING DATE: 2001-05-04
                                                                                                                                                                                                                                                                                                                                                                 APPLICANT: Fidock, Mark David
TITLE OF INVENTION: Novel Polypeptide
FILE REFERENCE: PC10959B
CURRENT APPLICATION NUMBER: US/10/763,854
CURRENT FILING DATE: 2004-01-22
                                                                                                                                                                                                                                                                                Sequence 1, Application US/10763854; Publication No. US20040137574A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Best Local Similarity 100.
Matches 1014; Conservative
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APPLICANT: Smithson, Glennda
APPLICANT: Smithson, Glennda
APPLICANT: Gunther, Erik
APPLICANT: Blaerman, Karen
APPLICANT: Padigaru, Muralidhara
APPLICANT: Taupier Jr., Raymond J
APPLICANT: Anderson, David W
APPLICANT: Anderson, David W
TITLE OF INVENTION: No. US20040024181A1el Human Proteins, Polynucleotides Encoding The FILE REPERBURE: 21402-191
CURRENT APPLICATION NUMBER: US/10/055,569A
                                                                                                                                                                                                                    1133 AGGGTCATTCGGATCGATCTCGCCTGCTTTCAATCAGTTGTTCCATTGAGAATCAGAATC 1192
                                                                                                                                                                                                                                                                                                                         1193 CATGAAGCTTACATCGTTTCTAGACCATTAGCTGCTCTGAACACCTTTGGTAACCTGTTA 1252
                                                                                                               1073 AGGCTAACCATTCTGCTACTCCTTGCATTTTACGTATGTTTTTTACCCTTCCATATCTTG
                               1013 ATTATCCACACTCTGACCCATGGACTGCAAACTGACAGCTGCCTTAAGCAGAAAGCAGA
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                                                                                                                                                                                                                                                                                            841 CATGAAGCTTACATCGTTTCTAGACCATTAGCTGCTCTGAACACCTTTGGTAACCTGTTA
                                                                                       721 AGGCTAACCATTCTGCTACTCCTTGCATTTTACGTATGTTTTTTACCCTTCCATATCTTG
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PRIOR APPLICATION NUMBER: 60/243,642
PRIOR APPLICATION NUMBER: 60/243,642
PRIOR FILING DATE: 2000-10-26
PRIOR PRIOR DATE: 2000-10-26
PRIOR PELING DATE: 2000-10-26
PRIOR PELING DATE: 2000-10-26
PRIOR PELING DATE: 2000-10-27
PRIOR APPLICATION NUMBER: 60/243,681
PRIOR APPLICATION NUMBER: 60/243,681
PRIOR APPLICATION NUMBER: 60/243,681
PRIOR APPLICATION NUMBER: 60/244,443
PRIOR PILING DATE: 2000-10-31
PRIOR PILING DATE: 2000-10-31
PRIOR APPLICATION NUMBER: 60/245,029
PRIOR PILING DATE: 2000-11-01
PRIOR PILING DATE: 2000-11-01
PRIOR FILING DATE: 2000-11-01
PRIOR FILING DATE: 2000-11-01
PRIOR FILING DATE: 2000-11-01
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PRIOR PILING DATE: 2000-11-01
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Gerlach, Valerie L
Edinger, Shlomit
Malyanker, Uriel
Stone, David
Millet, Isabelle
Smithson, Glennda
Gunther, Erik
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APPLICANT: Spytek, Kimberly I
APPLICANT: Glibert, Jennifer
APPLICANT: Caeman, Stacie
APPLICANT: Blalock, Angela
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Vernet, Corine
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100.0%; Pred. No. 6.8e-294;
tive 0; Mismatches 0;
PRIOR APPLICATION NUMBER: 60/265,163
PRIOR FILING DATE: 2001-01-30
PRIOR FILING DATE: 2001-01-30
PRIOR FILING DATE: 2001-01-30
PRIOR PILING DATE: 2001-03-02
PRIOR PLING DATE: 2001-03-09
PRIOR PLING DATE: 2001-03-09
PRIOR FILING DATE: 2001-03-09
PRIOR FILING DATE: 2001-03-16
PRIOR PLING DATE: 2001-03-16
PRIOR PLING DATE: 2001-03-26
PRIOR APPLICATION NUMBER: 60/276,680
PRIOR PLING DATE: 2001-03-26
PRIOR PLING DATE: 2001-03-26
PRIOR PLING DATE: 2001-03-26
PRIOR PLING DATE: 2001-03-21
PRIOR PLING DATE: 2001-04-25
PRIOR PLING DATE: 2001-03-31
PRIOR PLING DATE: 2001-07-31
PRIOR PLING DATE: 2001-07-31
PRIOR PLING DATE: 2001-08-29
PRIOR PLING DATE: 2011-08-29
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Matches 1014; Conservative
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PRIOR FILING DATE: 2000-11-02
PRIOR APPLICATION NUMBER: 60/245,315
PRIOR FILING DATE: 2000-11-02
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 137
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                                         100.0%; Score 1014; DB 16; Length 1851; 100.0%; Pred. No. 7.5e-294; ive 0; Mismatches 0; Indels 0;
                                                                                                                                                                                   Matches 1014; Conservative
                                                                                                                 ORGANISM: Homo sapiens
US-10-055-569A-7
                                                                                                                                                                     Similarity
                                                                                          LENGTH: 1851
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Pred. No. 1.6e-293;
0; Mismatches 1; Indels 0;
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US-09-943-798-3
; Sequence 3, Application US/09943798
; Patent No. US20020065215A1
; GENERAL INFORMATION:
   APPLICANT: Glaxo Group Limited
; TILE OF INVENTION: Polypeptide
; FILE REFRENCE: QG1021
; CURRENT APPLICATION NUMBER: US/09/943,798
; CURRENT FILING DATE: 2001-08-31
; NUMBER OF SEQ ID NOS: 4
; SOFTWARE: FASLSEQ for Windows Version 3.0
; SEQ ID NO 3
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TITLE OF INVENTION: ISOLATED HUMAN G-PROTEIN COUPLED
TITLE OF INVENTION: RECEPTORS, NUCLEIC ACID MOLECULES ENCODING HUMAN GPCR
TITLE OF INVENTION: PROTEINS, AND USES THEREOF
FILE REFERENCE: CLO00750CON
CURRENT APPLICATION NUMBER: US/10/270,144
CURRENT PILING DATE: 2002-10-15
PRIOR APPLICATION NUMBER: 60/205,196
PRIOR APPLICATION NUMBER: 2000-05-18
NUMBER OF SEQ ID NOS: 7
SOFTWARE: FASELSEQ FOR WINDOWS VERSION 4.0
                                                                                                                   301 TTTGGAGATTTCATGTGTAAGTTTATCCGCTTCAGCTTCCATTTCAACCTGTATAGCAGC
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LENGTH: 1014
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99.8%; Score 1012.4; DB 10; Length 1014;
Best Local Similarity 99.9%; Pred. No. 1.6e-293;
Matches 1013; Conservative 0; Mismatches 1; Indels 0;
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TITLE OF INVENTION: RECEPTOR GPCRXIO
FILE REFERENCE: 9409/2082
CURRENT APPLICATION NUMBER: US/09/885,453
CURRENT FILING DATE: 2001-06-20
PRIOR FILING DATE: 2001-06-21
NUMBER OF SEQ ID NOS: 12
SOFTWARE: Patentin version 3.1
SOFTWARE: Patentin version 3.1
LENGTH: 1014
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OTHER INFORMATION: GPCRX10 DNA sequence
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ORGANISM: Homo sapiens
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APPLICANT: Tian, Hui
APPLICANT: Chan, Jin-Long
APPLICANT: Chao, Jiagang
APPLICANT: Cutler, Gene
APPLICANT: Tularik Inc.
TITLE OF INVENTION: No. US20030082585A1e1 Receptors
FILE REFERENCE: 018781-008410US
CURRENT APPLICATION NUMBER: US/10/188,405
CURRENT FILING DATE: 2002-07-01
PRIOR FILING DATE: 2002-07-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                99.8%; Score 1012.4; DB 14; 99.9%; Pred. No. 1.6e-293; ative 0; Mismatches 1; II
                                                                                     ; Sequence 7, Application US/10188405; Publication No. US20030082585A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              CTHER INFORMATION: human TGR164
US-10-188-405-7
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SOFTWARE: Patentin Ver. 2.1
SEQ ID NO 7
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Best Local Similarity
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Pred. No. 1.6e-293;
0; Mismatches 1; Indels 0;
                                                          99.8%;
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                                                          Query Match
Best Local Similarity
Matches 1013; Conserv
       ORGANISM: Human
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| QY 241 CTGTATCTGACCAGCCTCCCTTCCTGATTCACTACTATGCCAGTGGCGAAAACTGGATC 300 DD 241 CTGTATCTGACCAGCCTCCCGTTCACTACTATGCCAGTGGCGAAAACTGGATC 300 QY 301 TTTGGAGATTTCATGTGAAGTTTATCCGCTTCAGCTTCCATTCAACCTGTATAGCAGC 360 DD 301 TTTGGAGATTTCATGTGAAGTTTATCCGCTTCAGCTTCCATTCAACCTGTATAGCAGC 360 DD 301 TTTGGAGATTTCATGTGAAGTTTATCCGCTTCCAGTTGAACCTGTATAGCAGC 360 DD 361 ATCCTCTTCCTCACCTGTTTCAGCATCTTCCGCTTCAGTTGATCATTCACCCAATGAGC 420 DD 421 TGCTTTTCCATTCACAAAACTCGATGTGAGTTGTAGCCTGTGGTGGATCATTCACCAATGAGC 420 QY 421 TGCTTTTCCATTCACAAAAACTCGATGTGAGCTGTGTGGTGGTGGTGGTGGATCATT 480 LIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII | | 841 841 901 901 961 | RESULT 12 US-10-225-567A-646 Sequence 646, Application US/10225567A Sequence 646, Application US/10225567A Sequence 646, Application US/10225567A Publication No. US2030113798A1 GENERAL INFORMATION: APPLICANT: LifeSpan Biosciences APPLICANT: Burmer, Gleenn C. APPLICANT: Gleenn C. APPL |
| 601 ATTTGACTGCAACTACTTTCTGCCTCCCTTGGTGACACTTTGCTATACCACG 603 ATTTTGACTGCAACTACTTTCTGCCTCCCTTGGTGACACTTTGCTATACCACG 604 ATTTTGACTGCAACTACTTTCTGCCTCCCCTTGGTGACACTTTGCTATACCACG 605 ATTATCCACACTCTGACCCATGGACTGCTGCTTAACCAGAAAGCACG 721 AGGCTAACCAACTGGACCATGGACTTTTTTTTTTTTTTT | Db 841 CATGATCATCATCATCATAGATCATTAGATCATTAGATCATTAGATCATTAGATCATTAGATCATTAGATCATTAGATCATTAGATCATTAGATCATTAGATCATTAGATCATTAGATCATTAGATCATTAGATCATTAGATCATTAGATCATTAGATCATTAGATCATTAGATCACACACA | | Query Match 99.8%; Score 1012.4; DB 15; Length 1014; Best Local Similarity 99.9%; Pred. No. 1.6e-293; Matches 1013; Conservative 0; Mismatches 1; Indels 0; Gaps Qy 1 ATGAATGACCACTAGACTATTAGCAAATGCTTCTGATTTCCCCGATTATGCAGCTGCT 60 Db 1 ATGAATGCCACTAGACTATTAGCAAATGCTTCTGATTTCCCCGATTATTATTATTATT 120 Qy 61 TTTGGAAATTGCACTGATGAAAACATCCCACTCAAGATGCACTACCTCCCTTATTTAT |

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APPLICANT: Chark Rupong
APPLICANT: Dang, Huong T.
APPLICANT: Dang, Huong T.
APPLICANT: Dang, Huong T.
APPLICANT: Lowitz, Kevins P.
APPLICANT: Lowitz, Kevins P.
APPLICANT: Lowitz, Kevins P.
TITLE OF INVENTION: Receptors
FILE REFERENCE: ARENOWGE: US/10/321,807
CURRENT APPLICATION NUMBER: US/20/212-16
PRIOR APPLICATION NUMBER: US/20/214,008
PRIOR FILING DATE: 2000-11-16
PRIOR FILING DATE: 1999-11-17
PRIOR FILING DATE: 1999-12-23
PRIOR PR
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Score 1012.4; DB 15; Length 1014; Pred. No. 1.6e-293; 0; Mismatches 1; Indels 0; 0
                                                                                                                                                     Sequence 27, Application US/10321807; Publication No. US20030166148A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 99.8%;
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Best Local Similarity 99.9
Matches 1013; Conservative
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US-10-321-807-27
                                                                                                                  RESULT 13
US-10-321-807-27
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                                                                                                                                                                     1; Indels
                                                                                                                  99.8%; Score 1012.4; DB 15
99.9%; Pred. No. 1.6e-293;
live 0; Mismatches 1;
                                                                                                                  Query Match
Best Local Similarity 99.9
Matches 1013; Conservative
                                           sapiens
                        ; TYPE: DNA
; ORGANISM: HOMO
US-10-225-567A-646
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99.9%; Pred. No. 1.6e-293;
tive 0; Mismatches 1;
FILE REFERENCE: 31671-186347
CURRENT APPLICATION NUMBER: US/10/343,650A
CURRENT FILING DATE: 2003-07-21
PRIOR APPLICATION NUMBER: UP 2000/237818
PRIOR FILING DATE: 2000-08-04
PRIOR FILING DATE: 2001-08-04
PRIOR FILING DATE: 2001-08-04
NUMBER OF SEQ ID NOS: 694
SEQ ID NO 13
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Best Local Similarity 99.9
Matches 1013; Conservative
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ORGANISM: Homo sapiens
                                                                                                                                             ; LOCATION: (1)..(1014)
US-10-343-650A-13
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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nucleic search, using sw model OM nucleic -

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(without alignments)
9177.436 Million cell updates/sec

US-10-763-854-1 1014

1 atgaatgagccactagacta.....gttactcaaacaacccttga 1014 Perfect score: Sequence:

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Total number of hits satisfying chosen parameters:

4134886 seqs, 2624710521 residues

Searched:

length: 0 length: 2000000000 DB seq] Minimum

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

23Sep04:* N_Genesed_

geneseqn1980s:* geneseqn1990s:* Database

geneseqn2002as:* geneseqn2002bs:* geneseqn2003as:* geneseqn2003bs:* geneseqn2001as:* geneseqn2001bs:* geneseqn2000s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution. geneseqn2004s:*

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| | Description | The second of th | had34278 Himan avo | | | | | Himan | Himan | Himan | Himan | Himan | Himan | Adc25997 Himan mir | Aad61652 Himan GDC | Ad196473 Human G n | Adm10573 Himan D2V | Human | | Himan | | Human | |
|-----------|----------------|--|--------------------|----------|----------|----------|----------|----------|------------|----------|----------|----------|----------|--------------------|--------------------|--------------------|--------------------|----------|----------|----------|----------|----------|--|
| SUMMARIES | ID | AAD26370 | AAD34278 | AB078847 | ABS51730 | ABS51678 | AAS07948 | ABN85630 | AAK98323 | ABK11381 | ABZ42876 | ABZ59170 | ABZ42582 | ADC25997 | AAD61652 | . ADL96473 | ADM10573 | AD029940 | AAD50885 | ABS59232 | AAD50883 | ABL56197 | |
| | DB | 9 | 9 | 9 | 9 | 9 | Ŋ | 9 | 9 | _ | 9 | œ | æ | 10 | 10 | 11 | 12 | 12 | œ | 9 | œ | 9 | |
| | Length DB | 1014 | 1014 | 1014 | 1560 | 1851 | 1014 | 1014 | 1014 | 1014 | 1014 | 1014 | 1014 | 1014 | 1014 | 1014 | 1014 | 1014 | 1029 | 1081 | 1179 | 1288 | |
| ф | Query Match | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 99.8 | 8.66 | 99.8 | 8.66 | 8.66 | 8.66 | 8.66 | 8.66 | 8.66 | 8.66 | 8.66 | 99.8 | 99.8 | 99.8 | 8.66 | 8.66 | |
| | Score | 1014 | 1014 | 1014 | 1014 | 1014 | 1012.4 | 1012.4 | 1012.4 | 1012.4 | 1012.4 | 1012.4 | 1012.4 | 1012.4 | 1012.4 | 1012.4 | 1012.4 | 1012.4 | 1012.4 | 1012.4 | 1012.4 | 1012.4 | |
| | Result No. | г | 7 | m | 4 | Ŋ | 9 | 7 | 6 0 | 6 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | |

| Adc86010 Human GPC | Aad50882 Human TAR | Human | | Himan | | Human | Himan | Abv29909 Human pro | Adh68218 Himan G-n | Aa143942 Himan C n | Adf70590 Ornhan re | Aah51011 Human nGP | Abs 20244 DNA encod | Adology Himan GDO | Abn85629 Himan P2V | Aad50884 Mouse TAR | Adm10575 Murine P2 | Aad50886 Mouse TAR | Ado30230 Mouse GPC | Aak52430 Himan nol | Adm10577 Rat P2V25 | Abv15662 Human nro | Aah50998 Human nGP |
|--------------------|--------------------|----------|----------|----------|----------|----------|----------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|) ADC86010 | AAD50882 | ABL56198 | AAK98324 | AAS08362 | ABV25767 | ABV30024 | ABV24026 | ABV29909 | 2 ADH68218 | AAL43942 | ADF70590 | AAH51011 | ABS70244 |) ADC12673 | ABN85629 | AAD50884 | : ADM10575 | AAD50886 | ADO30230 | AAK52430 | ADM10577 | ABV15662 | AAH50998 |
| 10 | 8 | 9 | 9 | 5 | 5 | 5 | - 5 | - | 12 | 9 | 10 | 4 | 9 | 10 | 9 | 80 | 12 | 60 | 12 | 4 | 12 | Ŋ | 4 |
| 1414 | 1797 | 5435 | 9905 | 1729 | 1729 | 1729 | 1729 | 1729 | 1729 | 101 | 1734 | 1020 | 1020 | 066 | 831 | 1014 | 1014 | 7399 | 101 | 1313 | 1014 | 740 | 578 |
| 99.8 | 99.8 | 99.8 | 8.66 | 7.66 | 99.7 | 99.7 | 7.66 | 99.7 | 99.7 | 99.5 | 99.5 | 96.3 | 96.3 | 9.68 | 81.8 | 72.5 | 72.5 | 72.5 | 72.2 | 71.8 | 71.3 | 55.3 | 53.0 |
| 1012.4 | 1012.4 | 1012.4 | 1012.4 | 1010.8 | 1010.8 | 1010.8 | 1010.8 | 1010.8 | 1010.8 | 1009.4 | 1009.4 | 976.2 | 976.2 | 908.4 | 829.4 | 735.6 | 735.6 | 735.6 | 732.6 | 728 | 722.8 | 560.8 | 537.2 |
| 22 | 23 | 24 | 25 | 56 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 33 | 40 | 41 | 42 | 43 | 44 | 45 |
| | | | | | | | | | | | | | | | | | | | | | | U | υ |

ALIGNMENTS

Human; G-protein coupled receptor 2; cell proliferative disorder; arteriosclerosis; hepatitis; cancer; neurological disorder; epilepsy; Alzheimer's disease; Parkinson's disease; cardiovascular disorder; atherosclerosis; hypertension; myocardial infarction; peptic ulcer; gastrointestinal disorder; dysphagia; anorexia; autoimmune disorder; coquired immune deficiency syndrome; inflammatory disorder; infection; Addison's disease; allergy; Grave's disease; metabolic disorder; AlDS; diabetes; obesity; osteoporosis; gene therapy; GREC-2; ss. Human G-protein coupled receptor 2 (GCREC-2) cDNA. AAD26370 standard; cDNA; 1014 BP (first entry) 26-MAR-2002 AAD26370; RESULT 1 AAD26370

Homo sapiens.

/product= "Human GCREC-2 protein" Location/Qualifiers 1. .1014 *tag= a

WO200187937-A2 22-NOV-2001

17-MAY-2001; 2001WO-US016285.

18-MAY-2000; 2000US-0205628P. 22-MAY-2000; 2000US-0206222P. 25-MAY-2000; 2000US-020566F. 02-JUN-2000; 2000US-0208834P. 02-JUN-2000; 2000US-0208861P.

(INCY-) INCYTE GENOMICS INC.

Graul R; Patterson C, Lu DAM, Thornton M, Lu Y, Tribouley CM, Graul R; Khan FA, Gandhi AR, Walia NK, Nguyen DB, Yue H, Hafalia A; Elliott VS, Lal P, Reddy R, Kallick DA, Tang TY, Au-Young J;

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the invention tradece to insume of process.

polypeptides and polynucleotides. GCREC polypeptides are useful for screening compounds that modulate their activity. They are useful in the diagnosis, prevention and treatment of disorders which include cell proliferative disorders such as arteriosclerosis, hepatitis, myelofibrosis, psoriasis and cancer including adenocarcinoma, leukaemia, proliferative disorders such as epilepsy, ischaemic cerebrovascular disorders such as epilepsy, ischaemic cerebrovascular disease, alzheimer's disease, Pick's disease, dementia, parkinson's disease, ataxias, multiple sclerosis, bacterial and viral cardiovascular disorders such as arteriovenous fistula, atherosclerosis, hypertension, vascular tumours, myocardial infarction, hypertension, vascular tumours, myocardial infarction, hypertension, pacticis andocarditis, cardiomyopathy, myocarditis, disease, infective andocarditis, cardiomyopathy, myocarditis, diarrhoea, emesis, anorexia, nausea, peptic ulcer, cholelithiasis, diarrhoea, constipation, acquired immune deficiency syndrome (Alisase, allergies, spondylitis, amyloidosis, anaemia, asthma, contact dematitis, Crohn's disease, diabetes mellitus, Goodbasture's syndrome, amplement of disease, diabetes mellitus, cardiomia arthmatorial amplement of disease, diabetes mellitus, cardiomia and cardiomia amplement of disease, diabetes mellitus, cardiomia a
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      emphysema, Grave's disease, out, multiple sclerosis, rheumatoid arthritis, systemic lupus erythematosus, uveitis, viral, bacterial, fungal, parasitic, protozoal and helminthic infections and trauma; metabolic disorders such as diabetes, obesity and osteoporosis; and viral infections such as infection caused by viral agent classified as adenovirus, arenavirus, bunyavirus. Polymucleotides of the invention are useful as probes for assessing toxicity of test compounds. They are also used in gene therapy. The present sequence is human G-protein coupled receptor 2 (GCREC-2) cDNA
                                                                                                        Novel G-protein coupled receptors and polynucleotides useful for diagnosis, treatment and prevention of disorders of cell proliferation, neurological, cardiovascular, metabolic disorders and viral infections.
                                                                                                                                                                                                                                                                                                                                                           invention relates to human G-protein coupled receptor (GCREC)
                                                                                                                                                                                                                                                                           Claim 5; Page 111-112; 115pp; English.
WPI; 2002-089844/12
                                                  P-PSDB; AAE16171.
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. 0 Length 1014; Sequence 1014 BP; 259 A; 263 C; 188 G; 304 T; 0 U; 0 Other; Indels Score 1014; DB 6; Pred. No. 1.9e-289; 100.0%; Best Local Similarity 100. Matches 1014; Conservative Query Match

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0 300 360 ATCCTCTTCCTCACCTGTTTCAGCATCTTCCGCTACTGTGTGATCATTCACCCAATGAGC 420 TGCTTTTCCATTCACAAAACTCGATGTGCAGTTGTAGCCTGTGCTGTGGTGTGGATCATT 480 triccacatricatereratriarcecricacricerricaecricariacatricaec 120 120 180 180 300 09 09 121 gecartarcriccricerdesarriccagecaargcagracidatarccacriacarric AAAATGAGACCTTGGAAGAAGAGCAGCATCATTATGCTGAACCTGGCCTGCACAGATCTG CTGTATCTGACCAGCCTCCCCTTCCTGATTCACTATGCCAGTGGCGAAAACTGGATC cretarcheaccaeccrecerrecrearreacracrareceagreeceaaaacregare TITGGAGATITCATGTGAAGTTTATCCGCTTCAGCTTCCATTTCAACCTGTATAGCAGC 1 ATGAATGAGCCACTAGACTATTTAGCAAATGCTTCTGATTTCCCCGATTATGCAGCTGCT GGCATTATCTTCCTCGTGGGATTTCCAGGCAATGCAGTAGTGATATCCACTTACATTTTC AAAATGAGACCTTGGAAGAGCAGCACCATCATTATGCTGAACCTGGCCTGCACAGATCTG 1 ATGAATGAGCCACTAGACTATTTAGCAAATGCTTCTGATTTCCCCGATTATGCAGCTGCT Gaps . 0 0; Mismatches 181 181 241 241 301 361 421 61 61 121 301 엄 à g 8 a ð g ð

crarargraeregreaceaecrarcraecaecrererecreereaeaecaereaeaeae 960 540 540 009 009 999 099 720 720 780 780 840 840 900 CTATATGTGGTGGTCAGCGACAACTTTCAGCAGGCTGTCTGCTCAACAGTGAGATGCAAA 960 421 recririrecarreacaaacredarerecadricraecererecrerecresereacarr 480 CATGAAGCTTACATCGTTTCTAGACCATTAGCTGCTCTGAACACCTTTGGTAACCTGTTA ATTATCCACACTCTGACCCATGGACTGCAAACTGACAGCTGCCTTAAGCAGAAAGCACGA AGGCTAACCATTCTGCTACTCCTTGCATTTTACGTATGTTTTTACCCTTCCATATCTTG AGGCTAACCATTCTGCTACTTCCATTTTACGTATGTTTTTTACCCTTCCATATCTTG CATGAAGCTTACATCGTTTCTAGACCATTAGCTGCTCTGAACACCTTTGGTAACCTGTTA 541 TCAGCCTGTCTCGACCTCACCAGTTCGGATGAACTCAATACTATTAAGTGGTACAACCTA rcagecrorercacereaceregaricaacereaaratearataaraaradaacera ATTITICACTICCAACTACTITICTGCCTCCCCTTGGTGATAGTGACACTTTGCTATACCACG AGGGTCATTCGGATCGAATCTCGCCTGCTTTCAATCAGTTGTTCCATTGAGAATCAGATC GTAAGCGGGAACCTTGAGCAAGCAAAGAAATTAGTTACTCAAACAACCCTTGA 1014 961 GTAAGCGGGAACCTTGAGCAAGCAAAAATTAGTTACTCAAACAACCTTGA 1014 601 661 601 199 721 781 841 901 196 721 781 841 901 541 481 엄 à g ò g ò g ò 셤 ð g 셤 엄 d à ð ð 8

AAD34278 standard; cDNA; 1014 BP (first entry) 16-JUL-2002 RESULT 2

Human AXOR89 (G-protein coupled receptor) cDNA.

Human, AXOR89 polypeptide; G-protein coupled receptor; vaccine; receptor; infection; cancer; pain; asthma; Parkinson's Disease; dibetes; obesity; annorexia; bulimia; acute heart failure; hypotension; hypertension; ulcer; stroke; urinary retention; osteoporosis; angina pectoris; schizophrenia; myocardial infarction; allergy; benign prostatic hypertrophy; migraine; vomitting; psychotic; neurological disorder; anxiety; manic depression; delirium; Huntington's Disease; Gilles dela Tourette's syndrome;

Homo sapiens

/product= "Human AXOR89 protein" Location/Qualifiers ø .1014

10-MAY-2001; 2001GB-00011437 13-FEB-2002

GB2365012-A

11-MAY-2000; 2000US-00569137.

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CTATATGTGGTGGTCAGCGACAACTTTCAGCAGGCTGTCTGCTCAACAGTGAGATGCAAA 960
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; G-protein coupled receptor; GPCR; PFI-019; neuroprotective;
anti-inflammatory; cytostatic; cardiovascular; antiallergic; hypotensive;
antiarteriosclerotic; osteopathic; hypertension; asthma;
artherosclerosis; gene; ss.
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                                                    541 reaccircicidacercacinedericadaricaaratariaariaagiagiacaacera
                                                                                                         601 ATTTGACTGCAACTACTTTCTGCCTCCCCTTGGTGATAGTGACACTTTGCTATACCACG
                                                                                                                                                                                                                         721 AGGCTAACCATTCTGCTACTCCTTGCATTTTACGTATGTTTTTACCCTTCCATATCTTG
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                                                                                                                                                                                                                                                                                                                            781 AGGGTCATTCGGATCGAATCTCGCCTGCTTTCAATCAGTTGTTCCATTGAGAATCAGATC
                                                                                                                                                                                                                                                                                                                                                             CATGAAGCTTACATCGTTTCTAGACCATTAGCTGCTCTGAACACCTTTGGTAACCTGTTA
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                                                                                       601 AITITGACTGCAACTACTITCTGCCTCCCCTTGGTGATAGTGACACTITGCTATACCACG
                                                                                                                                                       661 ATTATCCACACTCTGACCCATGGACTGCAAACTGACAGCTGCCTTAAGCAGAAAGCACGA
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P-PSDB; ABB81902.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The invention relates to an isolated AXOR89 polypeptide (G-protein coupled receptor) and its polynucleotide. The novel AXOR89 polypeptide and polynucleotide encoding the polypeptide, is useful for identifying agonists and antagonists (or inhibitors) that are potentially useful in treating conditions associated with an AXOR89 imbalance, much as betterfal, fungal or protozoan infections, cancers, pain, asthma, Parkinson's Disease, diabetes, obesity, anorexia, bulimia, acute heart failure, hypotension, hypertension, urinary retention, osteoporosis, angina pectoris, myocardial infarction, stroke, ulcers, allergies, benign prostatic hypertrophy, migraine, vomitting, psychotic and neurological disorders, anxiety, schizophrenia, manic depression, delirium, dementia, dyskinesias, such as Huntingron's Disease or Gilles dela Tourette's syndrome. The polynucleotide sequence may also be used for chromosome localisation or tissue expression studies. The AXOR89 is used as a parker and activities or to produce fusion proteins. The present sequence is human
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                                                                                                                                              Novel AXOR89 polypeptide and polynucleotide encoding it, useful for identifying agonists and antagonists in the treatment of diseases associated with an AXOR89 imbalance, such as cancers, diabetes or asthma.
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100.0%; Pred. No. 1.9e-289;
tive 0; Mismatches 0;
              SMITHKLINE BEECHAM CORP. SMITHKLINE BEECHAM PLC.
                                                                                                                                                                                                                  Claim 2; Page 30; 37pp; English
                                                                 Elshourbagy N, Shabon U;
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                                                                                                WPI; 2002-332558/37.
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Claim 9; Page 25; 252pp; English
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Tchernev VT,
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New G-protein coupled receptor (GPCR) polypeptide with homology to P2Y purinoreceptor, useful for treating e.g. inflammation or cancers in a patient, or for screening GPCR agonists or antagonists for treating these diseases.
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                                                                                                                                               The invention relates to a novel G-protein coupled receptor (GPCR), and the polynucleotide encoding it. The protein of the invention has neuroprotective, anti-inflammatory, cytostatic, cardiovascular, antiallergic, hypotensive, antiatreriosclerotic, and osteopathic activity. The GPCR polypeptide is useful for manufacturing a medicament the treating a patient who needs to upregulate a receptor. Preferably, therapeutically useful areas are hypertension, aschma, and artherosclerosis. The sequence encodes the G-protein coupled receptor of
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Pred. No. 1.9e-289;
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100.0%; Pred. No...
0; Mismatches
                                                                                                               Claim 1; Page 12; 19pp; English
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                                                                                                                                                                                                                                                                                                                   the invention, PFI-019
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Best Local Similarity
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Human; gene; ss; trauma; viral infection; parasitic infection; addiction; bacterial infection; Alzheimer's disease; Huntington's disease; anxiety; Parkinson's disease; behavioural disorder; pain; hair growth disease; antifarmatory disorder; arthritis; AIDS; inflammatory bowel disease; Crohn's disease; cancer; adenocarcinoma; acquired immunodeficiency syndrome; colon; asthma; hypertension; obesity; autoimmune disease; diabetes; graft versus host disease; ulcer; bulimia; anorexia; dementia; gene therapy.
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721 AGGCTAACCATTCTGCTACTCCTTGCATTTTACGTATGTTTTTTACCCTTCCATATCTTG 780
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                                                                                                                                                                                                                  CATGAAGCTTACATCGTTTCTAGACCATTAGCTGCTCTGAACCCCTTTGGTAACCTGTTA
                                                          AGGGTCATTCGGATCGATCTCGCCTGCTTTCAATCAGTTGTTCCATTGAGAATCAGAATC
                                                                                                                  AGGGTCATTCGGATCGAATCTCGCCTGCTTTCAATCAGTTGTTCCATTGAGAATCAGATC
                                                                                                                                                                                                                                                                                                  CTATATGTGGTGGTCAGCGACAACTTTCAGCAGGCTGTCTGCTCAACAGTGAGATGCAAA
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                                                                                                                                                                                CATGAAGCTTACATCGTTTCTAGACCATTAGCTGCTCTGAACCCTTTGGTAACCTGTTA
                                                                                                                                                                                                                                                                                                                                                                                                                    GTAAGCGGGAACCTTGAGCAAGCAAAGAAATTAGTTACTCAAACAACCTTGA 1014
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Li L, Ellerman KE, Zerhusen BD;
Boldog F, Gusev VY, Burgess CE,
M, Gunther E, Smithson G, Millet
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30-JAN-2001; 2001US-025163P.
09-MAR-2001; 2001US-027464P.
16-MAR-2001; 2001US-0274664P.
22-MAR-2001; 2001US-0277668P.
25-APR-2001; 2001US-027866P.
25-APR-2001; 2001US-0286409P.
29-AUG-2001; 2001US-0309246P.
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Shenoy SG, Li
Casman SJ, Bo
Malyankar UM,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           17-DEC-2001; 2001WO-US049122
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Gangolli EA,
Gerlach VL;
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1133 AGGGTCATTCGGATCGAATCTCGCCTGCTTTCAATCAGTTGTTCCATTGAGAATCAGATC 1192
                                                                     CATGAAGCTTACATCGTTTCTAGACCATTAGCTGCTCTGAACACCTTTGGTAACCTGTTA 1252
                                                                                                                                                                                                                                                                                                                                                                             Human; NOVX; pathological condition; NOVX-associated disorder; Von Hippel-Lindau syndrome; cirrhosis; transplantation disorder; pancreatitis; obseity; diabetes; autoimmune disease; infertility; renal artery stemosis; interstiial nephritis; glomerulonephritis; polycystic kidney disease; cataract; Alzheimer's disease; cancer; congenital heart defect; scleroderma; endometriosis; haemophilia; dementia; stroke; parkinson's disease; Huntington's disease; epilepsy; multiple sclerosis; anxiety; pain; leukaemia; hypothyroidism; psoriasis; ace; wound; asthma; human disease; calpain; epsi; ance; wound; asthma; human disease; calpain; epsi; synaptotagmin; pow density lipoprotein B: LDLB; purinoceptor; CG8841; synaptotagmin; serine procease TLSP; mitogen activated protein kinase kinase-2; glypican-2 precursor; thymosin beta-10; gene; ds.
                                        CATGAAGCTTACATCGTTTCTAGACCATTAGCTGCTCTGAACACCTTTGGTAACCTGTTA
                                                                                                   CTATATGTGGTGGTCAGCGACAACTTTCAGCAGGCTGTCTGCTCAACAGTGAGATGCAAA
                                                                                                                                                                          1313 GTAAGCGGGAACCTTGAGCAAGCAAAGAAAATTAGTTACTCAAACAACCCTTGA 1366
                                                                                                                                                            GTAAGCGGGAACCTTGAGCAAGCAAAGAAATTAGTTACTCAAACAACCTTGA 1014
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Gerlach V, Edinger S;
Gunther E, Padigaru
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Spytek KA, Gilbert J, Casman S, Shenoy S, Mishra V, Furtak K, G Stone D, Millet I, Smithson G,
                                                                                                                                                                                                                                                                                                                                                      DNA encoding human Purinoceptor-like protein.
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2000US-0243681P.

2000US-0243863P.

2000US-0244443P.

2000US-0244443P.
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2001US-0269056P.
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2001US-0276565P.
2001US-0318119P.
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P-PSDB; ABG70271.
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31-OCT-2000; 2
01-NOV-2000; 2
01-NOV-2000; 2
02-NOV-2000; 2
02-NOV-2000; 2
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27-OCT-2000;
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15-FEB-2001;
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07-SEP-2001;
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Malyankar U,
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The invention relates to human novel polynucleotides and polypeptides. The sequences are useful for the treatment, prevention and diagnosis of disorders such as trauma, viral/parasitic/bacterial infections, Alzheimer's disease, Huntington's disease, Parkinson's disease, behavioural disorders, anxiety, addiction, pain, hair growth disease, alopecia, pigmentation disorder, inflammatory disorders such as osteoned theumatoid arthritus, inflammatory bowel disease, crohn's disease, acquired immunodeficiency syndrome (AIDS), cancers such as colon cancer obesity, graft versus host disease, ulcer, bulimia, anorexia and edementia. Sequences ABSS1728-ABSS1748 represent human novel
                                                                                                                                                                                                                                                                                                                                              TITGGAAATTGCACTGATGAAACATCCCACTCAAGATGCACTACCTCCCTGTTATTAT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     CTGTATCTGACCAGCCTCCCCTTCCTGATTCACTATGCCAGTGGCGAAAACTGGATC
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                                                                                                                                                                                              Sequence 1560 BP; 419 A; 394 C; 308 G; 439 T; 0 U; 0 Other;
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Pred. No. 2.4e-289;
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                                                                                                                                                                polynucleotides of the invention
                                                                                                                                                                                                                           100.0%;
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Padigaru M;

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The present invention relates to a new polypeptide that comprises any of 17 fully defined sequences of 43-990 amino acids given in the specification. The NOWY polypeptide, nucleic acid and antibody of the invention are useful for treating or preventing a pathological condition in humans with a NOWX associated disorder, e.g. Von Hippel-Lindau syndrome, cirrhosis, transplantation disorders, pancreatitis, obesity, diabetes, autoimmune disease, renal artery stenosis, interstitial.

Alzheimer's disease, acoustic transma, cancer, infertility, alzheimer's disease, acoustic transma, cancer, infertility, alzheimer's disease, acoustic transma, cancer, infertility, cardiomyopathies, atherosclerosis, hypertension, congenital heart defects, scleroderma, endometriosis, haemophilia, dementia, stroke, parkinson's disease, Huntington's disease, epilepsy, multiple sclerosis, anxiety, pain, leukaemias, hypothyroidism, psoriasis, acne, wounds and anxiety, pain, leukaemias, hypothyroidism, psoriasis, acne, wounds and constitute of a medicament for the manufacture of a medicament for asthmatical and analysis and and analysis.
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         Isolated NOVX polypeptides and nucleic acid molecules useful for treating, preventing, diagnosing and researching pathological conditions in humans with a NOVX-associated disorders, e.g. cancer, stroke or
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100.0%; Score 1014; DB 6;
Best Local Similarity 100.0%; Pred. No. 2.6e-289;
Matches 1014; Conservative 0; Mismatches 0;
                                                                                                                              Claim 8; Page 32; 236pp; English.
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14-MAR-2000; 2000US-0189258P.
10-APR-2000; 2000US-0195898P.
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10-APR-2000; 2000US-0196078P.
12-MAY-2000; 2000US-0200419P.
12-MAY-2000; 2000US-02196078P.
12-UNN-2000; 2000US-0210741P. 99US-0166099P. 99US-016369P. 99US-0171900P. 99US-0171901P. 99US-0171902P. 2000US-0181749P. 99US-0166088P 2000WO-US031509 (first entry) ಗ .1014 /*tag= WO200136471-A2 23-DEC-1999; 23-DEC-1999; 23-DEC-1999; 11-FEB-2000; 14-MAR-2000; 16-NOV-2000; 23-OCT-2001 17-NOV-1999; 25-MAY-2001 841 AAS07948; 196 901 09 Homo AAS07948 RESULT 엄 d 8 셤 à 셤 ð g g 셤 ð à à ò

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                                                                                                                                                                                                                                                                                                                                                               The sequence encodes a human G-protein coupled receptor (GPCR), hRUP21. The endogenous and non-endogenous, constitutively activated versions of indemnan G-protein coupled receptors (GPCR), are useful for direct identification of candidate compounds as receptor agonists, inverse agonists or partial agonists having applicability as therapeutic agents for treating diseases related to GPCR, e.g. lung cancer. Non-endogenous version of human GPCRs are also utilized in research settings and in vivo system, incorporating GPCRs can be utilised to elucidate and understand the roles these receptors play in the human condition, both normal and diseased
                                                                                                                                                                                                                                                        Endogenous and non-endogenous versions of human G-protein coupled receptors for direct identification of candidate compounds as agonists,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      AAAATGAGACCTTGGAAGAGCAGCACCATCATTATGCTGAACCTGGCCTGCACAGATCTG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                inverse agonists or partial agonists for use as therapeutic agents
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match 99.8%; Score 1012.4; DB 5; Length 1014; Best Local Similarity 99.9%; Pred. No. 5.8e-289; Matches 1013; Conservative 0; Mismatches 1; Indels 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 1014 BP; 258 A; 263 C; 189 G; 304 T; 0 U; 0 Other;
                                                                                                                                                                                                                                                                                                                               Claim 55; Page 113-114; 160pp; English.
             2000US-0235418P.
2000US-0235779P.
2000US-0242332P.
2000US-0242343P.
2000US-0242343P.
   2000US-0226760P.
                                                                                                                                                                    Lowitz KP;
                                                                                                                            (AREN-) ARENA PHARM INC
                                                                                                                                                                                                    WPI; 2001-355616/37.
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                                                                                                                                                                                                                     P-PSDB; AAU04375
                                                   20-OCT-2000;
20-OCT-2000;
24-OCT-2000;
21-AUG-2000;
26-SEP-2000;
26-SEP-2000;
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An isolated P2Y-like receptor polypeptide (HIPHUM 0000037) which can be used for the identification of agonists and antagonists which may be used to treat an immune or inflammatory disease.

Claim 5; Page 28-29; 35pp; English.

The invention relates to an isolated P2Y-like receptor polypeptide (ABB83818-ABB83819) which is also referred to in the specification as HIPHUM 0000037. An effective amount of a substance (agonist or antagonist) which modulates P2 receptor activity is useful to treat a canagonist) which modulates P2 receptor activity is useful to treat a subject having a disorder that is responsive to P2Y-like receptor consistence may also be used to manufacture a medicine for the treatment or prophylaxis of a disorder that is responsive to stimulation or modulation or prophylaxis of a disorder that is responsive to stimulation or modulation or prophylaxis activity. Disorders which may be treated include colon cancers, asthma, COPD, Crohn's disease, irritable bowel syndrome, colon cancers, asthma, copp, crohn's disease, irritable bowel syndrome, colitis, rheumatoid arthritis, inflammatory bowel syndrome, ulcerative autoimmune diseases, dermatitis, glomerulonephritis allergies, allergic rhinitis, inflammatory pain and general inflammation such as tendonitis, colymyositis or prostatitis. The invention provides alternative substances for the treatment of immunological and inflammatory diseases.

The present sequence is that the P2Y-like receptor variant encoding gene the invention

Sequence 1014 BP; 258 A; 263 C; 189 G; 304 T; 0 U; 0 Other;

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ö 120 120 300 360 180 180 240 300 360 420 420 480 480 540 540 541 reagcergreregacereaceagricogardaacreaaracrarraagreeracaacere 600 601 ATTITGACTGCAACTACTITCTGCCTCCCTTGGTGATAGTGACACTTTGCTATACCACG 660 9 9 reacreginaciercineceardacerrerrearcaeteaecaacaacaacaacaa TCAGCCTGTCTCGACCTCACTTCGGATGAACTCAATACTATTAAGTGGTACAACCTA 1 ATGAATGAGCCACTAGTTTAGCAAATGCTTCTGATTTCCCCGGATTATGCAGCTGCT 1 ATGAATGAGCCACTAGACTATTTAGCAAATGCTTCTGATTTCCCCGATTATGCAGCTGCT GGCATTATCTTCCTCGTGGGATTTCCAGGCAATGCAGTAGTGATATCCACTTACATTTTC GGCATTATCTTCCTCGTGGGATTTCCAGGCAATGCAGTAGTGATATCCACTTACATTTTC AAAATGAGACCTTGGAAGAGCACCACCATTATGCTGAACCTGGCCTGCACAGATCTG CTGTATCTGACCAGCCTCCCCTTCCTGATTCACTACTATGCCAGTGGCGAAAACTGGATC CIGIAICIGACCAGCCICCCCITCCIGAITCACIACIATGCCAGIGGCGAAAACIGGAIC TITGGAGATITICATGTGAAGTITIATCCGCTTCAGCTTCCATTTCAACCTGTATAGCAGC TITGGAGAITICATGTGTAAGTTTATCCGCTTCAGCTTCCATTTCAACCTGTATAGCAGC ATCCTCTTCCTCACCTGTTTTCAGCATCTTCCGCTACTGTGTGATCATTCACCCAATGAGC Arceretrecreacergrineagearcricegeracrerergarearreacecaargage Gaps Query Match
99.8%; Score 1012.4; DB 6; Length 1014;
Best Local Similarity 99.9%; Pred. No. 5.8e-289;
Matches 1013; Conservative 0; Mismatches 1; Indels 0; 61 181 241 301 301 361 361 421 481 481 541 61 181 421 121 121 241 qq g ò á ઠ g ò g à

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780 840 900 096 780 840 900 CTATATGTGGTGGTCAGCGACAACTTTCAGCAGGCTGTCTGCTCAACAGTGAGATGCAAA 960 720 720 Human purinergic-related G-protein coupled receptor (GPCR) cDNA sequence. Novel isolated G-protein coupled receptor peptide useful for treating disorder characterized by absence of, in appropriate or unwanted expression of the receptor protein, and as immunogens to raise antibodies. AGGCTCATTCGGATCGAATCTCGCCTGCTTTCAATCAGTTGTTCCATTGAGAATCAGATC 841 CATGAAGCTTACATCGTTTCTAGACCATTAGCTGCTCTGAACACCTTTGGTAACCTGTTA 901 crarargregregreaccaccaccriricaccaccrercrecreaccaccaccaccaccaccaccac AGGCTAACCATTCTGCTACTCCTTGCATTTTACGTATGTTTTTACCCTTCCATATCTTG 781 AGGGTCATTCGGATCGAATCTCGCCTGCTTTCAATCAGTTGTTCCATTGAGAATCAGATC CATGAAGCTTACATCGTTTCTAGACCATTAGCTGCTCTGAACACCTTTGGTAACCTGTTA ATTATCCACACTCTGACCCCATGGACTGCAAACTGACAGCTGCCTTAAGCAGAAAGCACGA GTAAGCGGGAACCTTGAGCAAGCAAAGAAATTAGTTACTCAAACAACCTTGA 1014 Human; chromosome 13; purinergic GPCR; G-protein coupled receptor; signal transduction; human protease; GPCR disorder; gene therapy; g The present specifically claimed human cDNA sequence (located E Beasley "G-protein coupled receptor" Di Francesco V, Location/Qualifiers BP. Claim 23; Fig 1; 64pp; English AAK98323 standard; cDNA; 1014 17-MAY-2001; 2001WO-US015957 Cravchik A, 18-MAY-2000; 2000US-0205196P 08-AUG-2000; 2000US-00634656 transgenic animal; gene; ss /*tag= a /product= ' 30-APR-2002 (first entry) .1014 (APPL-) APPLERA CORP. 2002-075312/10. P-PSDB; AA014027 Zhao Q, WO200187980-A2 Homo sapiens. 22-NOV-2001 AAK98323; 601 661 661 721 721 781 841 901 961 961 Wei M, AAK98323 RESULT g 셤 염 g Dp 9 à à ò ò ò ð

the production of transgenic animals 99.8%; Best Local Similarity 99.9 Matches 1013; Conservative 61 121 181 121 181 241 301 361 301 361 421 481 421 ð à 셤 ò 셤 ò g qq q à ò 임 ò a ò d

ABK11381 g ò 셤 ò 윱 δ g δ 임 ð g chromosome 13) encodes a purinergic-related G-protein coupled receptor (GPCR) of the invention. GPCRs constitute a major class of proteins responsible for signal transduction within a cell. Upon binding of a ligand to the extracellular portion of a GPCR, a signal is transduced resoluting in a biological or physiological change within the cell. The GPCR proteins can be divided into five families, family I contains the curinergic GPCRS (e.g. the P2Y receptors). P2Y receptors are characterised by their selective responsiveness towards AFP and its characterised by their selective responsiveness towards AFP and its characterised by their selective responsiveness towards AFP and its characterised by their selective receptors are not in the treatment of control and nucleic acids of the invention are useful in the treatment of protein and nucleic acids of the invention are useful in the treatment of the invention is useful for: the development/identification of the invention is useful for: the development/identification of the characterised of the activity of the GPCR, or the interaction of the GPCR protein. The cycle acids of the invention and account and anotecule with which it normally interacts; and treating a disorder characterised by an absence of, or inappropriate expression of the GPCR protein. The GPCR nucleic acids of the invention are useful in diagnostic assays to defining GPCR expression; and in gene therapy to treat patients with the number of the invention are useful in diagnostic assays to the invention are useful in diagnostic assays to the invention are useful in diagnostic assays to the invention; and in gene therapy to treat patients with the number of the controlling GPCR expression; and in gene therapy to treat patients with the number of the invention and in gene therapy to treat batients with the number of the controlling GPCR protein and in gene decreased in the number of the controlling acids of ö 540 120 120 180 GGCATTATCTTCCTGGGGATTTCCAGGCAATGCAGTAGTGATATCCACTTACATTTTC 180 240 240 300 300 420 TGCTTTTCCATTCACAAAACTCGATGTGCAGTTGTAGCCTGTGCTGTGGTGGATCATT 480 TITGGAGATITCATGTGTAAGTTTATCCGCTTCAGCTTCCATTTCAACCTGTATAGCAGC 360 TTTGGAGATTTCATGTGAAGTTTATCCGCTTCAGCTTCCATTTCAACCTGTATAGCAGC 360 480 TCAGCCTGTCTCGACCTCACCAGTTCGGATGAACTCAATACTATTAAGTGGTACAACCTA 600 099 ATCCTCTTCCTCACCTGTTTCAGCATCTTCCGCTACTGTGTGATCATTCACCCAATGAGC 420 rcasccrercicaccreacites are reacted and reacted research con ATTITIGACTGCAACTACTITICTGCCTCCCCTTGGTGATAGTGACACTTTGCTATACCACG 660 9 9 1 ATGAATGAGCCACTAGACTATTTAGCAAATGCTTCTGATTTCCCCCGATTATGCAGCTGCT 1 ATGAATGAGCCACTAGACTATTTAGCAAATGCTTCTGATTTCCCCGATTATGCAGCTGCT AAAATGAGACCTTGGAAGGAGCAGCATCATTATGCTGAACCTGGCCTGCACAGATCTG CTGTATCTGACCAGCCTCCCCTTCCTGATTCACTACTATGCCAGTGGCGAAAACTGGATC CIGIALCIGACCAGCCTCCCCTTCCTGATTCACTACTATGCCAGTGGCGAAAACTGGATC GGCATTATCTTCCTCGTGGGATTTCCAGGCAATGCAGTAGTGATATCCACTTACATTTTC AAAATGAGACCTTGGAAGGAGCAGCACCATCATTATGCTGAACCTGGCCTGCACAGATCTG ATCCTCTTCCTCACCTGTTTCAGCATCTTCCGCTACTGTGTGATCATTCACCCAATGAGC recririccaricacaaaacresarsiscasistrarsiscassiscassiscasis reacregrationary ATTITGACTGCAACTACTITCTGCCTCCCCTTGGTGATAGTGACACTTTGCTATACCACG 0; Gaps Score 1012.4; DB 6; Length 1014; Pred. No. 5.8e-289; 0; Mismatches 1; Indels 0; Sequence 1014 BP; 258 A; 263 C; 189 G; 304 T; 0 U; 0 Other; 601 481 541 541 601

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840 780 900 900 840 960 CTATATGTGGTGGTCAGCGACAACTTTCAGCAGGCTGTCTGCTCAACAGTGAGATGCAAA 960 Novel human P2Y1-like G protein-coupled receptor polypeptide which can be regulated for treating infection, pain, cancer, diabetes, anorexia, asthma, hypertension, neurological disorder and dyskinesia. Human; ds; gene; P2Y1-like G protein-coupled receptor; GPCR; infection; pain; cancer; anorexia; bulimia; asthma; hypotension; central nervous system disease; acute heart failure; hypertension; urinary retention; osteoporosis; diabetes; angina pectoris; myocardial infarction; ulcer; inflammation; allergy; multiple sclerosis; benign prostatic hypertrophy; psychosis; neurological disorder; dyskinesia; HIV; human immunodeficiency virus infection; CNS disorder; Parkinson's disease; anxievy, schizophrenia; manic depression; delirium; dementia; severe mental retardation; Huntington's disease; 721 AGGCTAACCATICTGCTACTCCTTGCATTTTACGTATGTTTTTACCCTTCCATATCTTG CTATATGTGGTGGTCAGCGACAACTTTCAGCAGGCTGTCTGCTCAACAGTGAGATGCAAA AGGGTCATTCGGATCGAATCTCGCCTGCTTTCAATCAGTTGCTTCCATTGAGAATCAGATC CATGAAGCTTACATCGTTTCTAGACCATTAGCTGCTCTGAACACCTTTGGTAACCTGTTA GTAAGCGGGAACCTTGAGCAAGCAAAGAAATTAGTTACTCAAACAACCCTTGA 1014 961 GTAAGCGGGAACCTTGAGCAAGCAAAGAAATTAGTTACTCAAACAACCCTTGA 1014 Human DNA encoding P2Y1-like G protein-coupled receptor. /*tag= a /product= "P2Y1-like GPCR" Location/Qualifiers ABK11381 standard; DNA; 1014 BP 10-AUG-2001; 2001WO-EP009243. 14-AUG-2000; 2000US-0224989P. (first entry) .1014 Tourette's syndrome. WPI; 2002-257607/30. (FARB) BAYER AG P-PSDB; AAU77600 Ramakrishnan S; WO200214511-A2. Homo sapiens. 05-JUN-2002 21-FEB-2002 781 781 841 841 901 196 ABK11381; 721 901 RESULT 9

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The invention relates to a purified human P2Y1-like G protein-coupled receptor (GPCR) polypeptide and the nucleic acids encoding it (including conditions) are demonsters, fragments, variants, or a sequence encoding a protein at least 50% identical to the GPCR. Also included are encoding a protein at least 50% identical to the GPCR. Also included are concoding a polynucleorising the mucleic acid, a host cell containing the vector and the identification of modulators of the GPCR especially those that reduce the activity of the GPCR. The nucleic acid is useful concerned a polynucleoride encoding the GPCR in a biological sample. The GPCR and nucleic acid are useful for screening for agents which concerned a cartivity of the GPCR and for modulators of the GPCR. The GPCR and viral infection, pain, cancer, anorexia, bullimia, asthma, contral nervous system (GNS) disease such as bacterial, fungal, contral nervous system (GNS) disease, acute heart failure, hypotension, hypertension, urinary retention, osteoporosis, diabetes, angina pectoris, contral infarction, ulcer, inflammation, allergy, multiple sclerosis, benign prostatic hypertrophy, psychotic and neurological disorders, disorders such as Parkinson's disease, anxiety, schizophrenia, manic disorders multiple sclerosis, disorders such as Parkinson's disease, anxiety, schizophrenia, manic disorders, disease and Tourette's syndrome. The present sequence encodes the P2Y1-like GPCR of the invention
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Pred. No. 5.8e-289;
0; Mismatches 1; Indels
Claim 1; Fig 5; 118pp; English
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The invention relates to a method for screening G protein-coupled receptor (GPCR) genes (ABZ42870-ABZ43216) and/or GPCR proteins (ABB95596-ABB95421) by extracting open-reading frames containing 6-8 transmembrane domains with 250-1000 amino acid residues to give a gene homologous with a known GPCR gene. The receptor proteins and encoded genes are useful for studying in vivo signal transduction mechanism and identifying targets for drug development e.g. based on olfactory and gustatory receptors in form of agonists and antagonists by screening intrinsic and extrinsic ligands as bitter taste inhibitors, taste enhancers and fragrance
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601 ATTITGACTGCAACTACTITCTGCCTCCCTTGGTGATAGTGACACTTTGCTATACCACG 660
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                                                                                               AGGCTAACCATTCTGCTACTCCTTGCATTTTACGTATGTTTTTTACCCTTCCATATCTTG
                                                                                                                 CATGAAGCTTACATCGTTTCTAGACCATTAGCTGCTCTGAACACCTTTGGTAACCTGTTA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Human GPCR polynucleotide SEQ ID NO 13.
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 improvers. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in electronic format directly from WIPO at ftp.wipo.int/pub/published_pct_sequences
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                                                                                 6; Length 1014;
                                                  Sequence 1014 BP; 258 A; 263 C; 189 G; 304 T; 0 U; 0 Other;
                                                                                                          1; Indels
                                                                             Score 1012.4; DB 6
Pred. No. 5.8e-289;
0; Mismatches 1;
                                                                              99.8%;
                                                                                           Best Local Similarity 99.9
Matches 1013; Conservative
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The invention provides new G-protein coupled receptor (GPCR) polypeptides designated TGR2, TGR38, TGR18, TGR164, TGR343 and TGR358 and encoding bolynucleotides. The polypeptides can be expressed by standard DNA recombination methodology. The polypeptides are useful for screening or identifying modulators of GPCR or signal transduction. The modulators of signal transduction are useful for treating or preventing TGR-associated disorders, e.g. asthma, multiple solerosis or kidney disease. The polypeptides are useful as targets for diagnosing or treating e.g. epplepps, stroke, neurodegeneration, hypogonadism, hyperprolactinemia, asymptomatic urinary abnormalities, hypertension, nephrolithiasis, cirrhosis, lesions, jaundice, psoriasis, lupus erythematosus, or acute inflammatory dermatoses. The present sequence represents a human TGR164
                                                                                                                                                                                                                                                                               TGR358; antiasthmatic; neuroprotective; cerebroprotective; nephrotropic; anticonvulsant; hypotensive; hepatotropic; dermatological; human; immunosuppressive; antiinflammatory; gene; ds.
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Alzheimer's disease; atherosclerosis; infection; osteoarthritis; allergy; osteoporosis; cardiomyopathy; inflammation; Crohn's disease; diabetes; graft versus host disease; Parkinson's disease; multiple sclerosis; pain; psoriasis; anxiety; depression; schizophrenia; dementia; memory loss; mental retardation; epilepsy; asthma; tuberculosis; obesity; nausea; hypertension; hypotension; renal disorder; rheumatoid arthritis; trauma; ulcer; gene; ds. G protein-coupled receptor; GPCK; antibody; immune-related disease; growth-related disease; call regeneration-related disease; AIDS; cancer; immunological-related call proliferative disease; autoimmune disease; immunological-related call proliferative disease; autoimmune disease; allergy protein-coupled receptor; GPCR; antigenic peptide; gene therapy; Human G protein-coupled receptor GPR80 nucleotide SEQ ID NO:646. (LIFE-) LIFESPAN BIOSCIENCES INC Brown JP; 19-DEC-2001; 2001WO-US050107. 19-DEC-2000; 2000US-0257144P. Burmer GC, Roush CL, WPI; 2003-046718/04. P-PSDB; ABP81736. WO200261087-A2. Homo sapiens. 08-AUG-2002

New isolated antigenic peptides e.g., for G protein-coupled receptors (GPCR), useful for diagnosing and designing drugs for treating conditions in which GPCRs are involved, e.g. AIDS, Alzheimer's disease, cancer or autoimmune diseases.

Disclosure, Fig 1; 523pp; English.

The present invention describes antigenic peptides (I) comprising: (a) any one of 1601 sequences (see ABP82019 to ABP83619) of 12-24 amino cacids. Also described: (I) an assay for the detection of a particular GPCR, or a candidate polypeptide in a sample; and (2) an isolated antibody having high specificity and high affinity or avidity for a particular GPCR. (I) can be used as GPCR modulators and in gene therapy. The antigenic peptides for GPCRs are useful in detecting an artibody against a particular GPCR, and in the production of specific antibody against a particular GPCR, and in the production of specific antibodies. The peptides and antibodies are also useful for detecting the CC antibodies. The peptides and antibodies are also useful for detecting the creating immune-related disease, immunological cell proliferative compensation-related diseases, convert-related diseases, cell proliferative diseases, or autoimmune diseases, erg. ALDS, Alzheimer's disease, atheroscierosis, bacterial, fungal, protozoan or viral infections, atheroscierosis, bacterial, fungal, protozoan or viral infections, osteoarthritis, osteoporosis, cancer, cardiomyopathy, chronic and acute inflammation, allergies, Crohn's disease, diabetes, graft versus host disease, parkinson's disease, multiple sclerosis, pain, psoriasis, cancer, dependentia, mental retardation, memory entited. ö loss, epilepsy, asthma, tuberculosis, obesity, nausea, hypertension, hypotension, renal disorders, rheumatoid arthritis, trauma, ulcers, or any other disorder in which GPCRs are involved. The antibodies may be used in immunoassays and manunodiagnosis. ABZ42523 to ABZ42869 encode GPCR proteins given in ABP81675 to ABP82018, which are used in the exemplification of the present invention

Sequence 1014 BP; 258 A; 263 C; 189 G; 304 T; 0 U; 0 Other;

DB 8; Length 1014; Score 1012.4; DB 8, Pred. No. 5.8e-289; 0; Mismatches 1; Query Match Best Local Similarity 99.9%; Matches 1013; Conservative

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1 ATGAATGAGCCACTAGACTATTTAGCAAATGCTTCTGATTTCCCCGATTATGCAGCTGCT

(first entry)

04-MAR-2003 ABZ42582;

ABZ42582

18-DEC-2003 (first entry)

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/note= "All translation exceptions are present within the
"original" protein CDS"
                                                                                                                                   nootropic; neuroprotective; antiparkinsonian; G-protein coupled receptor; GCR; virtal; fungal; bacterial infection; immune-related disorder; cancer; pain; diabetes; obesity; anorexia; acute heart failure; hypertension; osteoporosis; angina pectoris; atherosclerosis; stroke; hypertension; osteoporosis; angina pectoris; atherosclerosis; stroke; diec; psychotic neurological disorder; schizophrenia; dementia; degenerative disease; Parkinson's; Alzheimer's; dyskinesia; Huntington's; human; GPCRx10; purinergic receptor P2Y; ds; gene; chromosome 13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                receptor, polynucleotide, agonist, reverse agonist and antagonist of the invention may be useful for treating receptor-mediated disorders including viral, fungal or bacterial infections, immune-related disorders
                                                                              analgesic; antidiabetic;
                                                                                                                                                                                                                                                                                                                                                                                            /product= "Human purinergic receptor P2Y-related GPCRx10 protein - both "original" and "alternative" versions"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     such as cancer, pain, diabetes, obesity, anorexia, acute heart failure, hypertension, osteoporosis, angina pectoris, atherosclerosis, stroke, ulcer and allergy, as well as psychotic and neurological disorders such as schizophrenia and dementia, degenerative diseases such as Parkinson's disease and Alabeimer's disease and dyskinesias such as Huntington's disease. The current sequence is that of the human purimergic receptor P2Y-related GPCRx10 DNA of the invention which is located on chromosome
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    New human G-protein coupled receptor, useful for treating receptor-mediated disorders, e.g. infections, cancer, pain, diabetes, obesity, acute heart failure, osteoporosis, stroke, ulcer, allergy, or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         The invention relates to a novel G-protein coupled receptor (GPCR).
                                                                         virucide; fungicide; antibacterialc; cytostatic; analgesic; antidi; anorectic; cardiant; hypotensive; osteopathic; antianginal; antiarteriosclerotic; cerebroprotective; anti-ulcer; antiallergic;
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                                       Human purinergic receptor P2Y-related GPCRx10 DNA
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The present invention relates to novel G-protein coupled receptors (GPCRs) and the nucleic acids encoding them. The invention is useful for tracting viral, bacterial and fungal infections, inflammatory and neoplastic processes, pain, diabetes, hypertension, osteoporosis, angina pectoris, myocardial infarction and atherosclerosis. The present
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                                                                                               Human; G-protein coupled receptor; GPCR; infection; neoplastic process; inflammation; myocardial infarction; atherosciaerosis; angina pectoris; hypertension; osteoporosis; antibacterial; cycostatic; fungicide; pain; diabetes; cancer; virucide; analgesic; cardiant; gene; ds.
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ADL96473 standard; cDNA; 1014
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16-NOV-2000; 2000US-00714008.
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Pred. No. 5.8e-289;
0; Mismatches 1;
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Matches 1013; Conservative
CHEN R.
DANG H T.
LOWITZ K P.
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P-PSDB; ADL96474.
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Fidock,M.D.

Novel Polypeptide

Patent: JP 2003024081-A 1 28-JAN-2003;

Pfizer Lid (EP(GB) only), Pfizer Inc (US JP EP except GB)

OS Homo sapiens

PN JP 200304081-A/1

PP 13-DEC-2001 JP 2001382712

PR 18-DEC-2000 GB 0030854.4,04-MAY-2001 GB 0111031...

mark david fidock

CC

FH Key

Location/Qualifiers.
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CQ498060 S
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/mol_type="genomic DNA"
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AX661905 Sequence
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AX148186 Sequence
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Patterson, C., Lu, D. A., Thornton, M., Lu, Y., Tribouley, C.M., Graul, R., Khan, F.A., Gandhi, A.R., Walia, N.K., Nguyen, D.B., Yue, H., Hafalia, A., Elliott, V.S., Lal, P., Reddy, R., Kallick, D.A., Tang, T.Y.
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/organism="Homo sapiens"
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

ACCESSION VERSION KEYWORDS SOURCE ORGANISM

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| | 661 ATTATCCACACTCTGACCCATGGACTGACAGCTGCCTTAAGCAGAAGCACGA 720 [61] ATTATCCACACTCTGACCCATGGACTGCAACTGACCTGCCTTAAGCAGAAAGCACGA 720 [61] ATTATCCACACTCTGACCCATGGACTGCATTTTACCTTTATACCTTTATACCTTCCATATCTTG 780 [72] AGGCTAACCATTCTGCTACTCCTTGCATTTTACGTATCTTTTTACCCTTCCATATCTTG 780 [73] AGGCTAACCATTCTGCTACTCCTTGCATTTTACGTATCTTTTTACCCTTCCATATCTTG 780 [74] AGGCTAACCATTCTGCTACTCCTTCCATTTACGTATCTTTTTACCCTTCCATATCTTG 780 [75] AGGCTATCGGATCTCCACTCCTTTCAATCAGTTCTTTTTACCCTTTCAATCAGTTC 840 [76] [77] [77] [77] [77] [77] [77] [77] | TION SO TION SO TO TO SO TO TO SO TO TO SO TO | 1 ATGAATGAGCCACTAGACTATTTAGCAAATGCTTCTGATTTTCCCCGATTATGCAGCTGCT 60 |
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| 61 TITGGAAATIGCACTGATGAAAACAICCCACTCAAGAIGCACTACCTCCCTGTTATITAT 129 | GGCATTAICTTCCTCGTGGGATTTCCAGGCAATGCCAGTAGTGATATCCACTTACATTTTC | | | 301 TITGGAGATTICAIGIGIAAGIITAICCGCTICAGCTICCAITICAACCIGIAIAGCAGC 3 | 361 ATCCTCTTCCTCACCTGTTTCACATCTTCCGCTACTGTGTGATCATTCACCCAATGAGC 4 | 421 IGCTITICCATICACAAAACICGAIGIGCAGTIGIAGCCIGIGCIGIG | 481 TCACTGGTAGCTGTCATTCCGATGACCTTCTTGATCACATCAACCAAC | 541 TCAGCCTGTCTCGACCTCACCAGTTCGGATGAACTCAATACTATTAAGTGGTACAACCTA 6 | 601 ATTITGACTGCAACTACTTTCTGCCTCCCCTTGGTGATAGTGACACTTTGCTATACCACG (| 661 ATTATCCACACTCTGACCCATGGACTGCAAACTGACAGCTGCCTTAAGCAGAAAGCACGA 3 | 721 AGGCTAACCATTCTGCTACTCCTTGCATTTTACGTATGTTTTTTACCCTTCCATATCTTG : | 781 AGGGTCATTGGGATCGGATCTCGCCTGCTTTCAATCAGTTGTTCCATTGAGAATCAGATC 8 | 841 CAIGAAGCTIACATCGTITCIAGACCATIAGCIGCICTGAACACCTITGGTAACCTGTTA 9 | 901 CTATATGTGGTGGTGGGGGACAACTTTGAGGGGTGTCTGCTCAACAGTGAGAGAA 91253 CTATATGTGGTGGTGGTGGGAAACTTTCAGCAGGCTGTCTGCTGAACAGGTGGTGGTGGTGGTGGCAACTTTCAGCAGGCTGTCTGCTGAACGTGAGAGGCAAA | 961 GTAAGCGGGAACCTTGAGCAAGCAAAGAAATTAGTTACTCAAACAACCATGA 1014 | |
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Human proteins, polynucleotides encoding them and methods of using 406 Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. CTGTATCTGACCAGCCTCCCCTTCCTGATTCACTATGCCAGTGGCGAAAACTGGATC ATTITIGACTIGGAACTACTITICTIGGCTCCCTTIGGTGATAGTGACACTTTIGCTATACCACG ATTATCCACACCTCTGACCCCATGGACTGCAAACTGACAGCTGCCTTAAAGCAGAAAGCACGA 407 TITGGARATIGCACIGATGAAACAICCCACICAAGAIGCACIACCICCCIGIIAITTAI 467 GGCATTATCTTCCTCGTGGGATTTCCAGGCAATGCAGTAGTGATATCCACTTACATTTTC TITGGAGATITICATGTGTAAGTTTATCCGCTTCAGCTTCCATTTCAACCTGTATAGCAGC 707 Arcererecererereseacarerececracereresearcareceareaec GGCATTATCTTCCTCGTGGGATTTCCAGGCAATGCAGTAGTGATATCCACTTACATTTTC AAAATGAGACCTTGGAAGAGCAGCACCATCATTATGCTGAACCTGGCCTGCACAGATCTG 241 CIGIAICIGACCAGCCICCCCTICCIGAITCACTACTATGCCAGIGGCGAAAACTGGAIC ATCCTCTTCCTCACCTGTTTCAGCATCTTCCGCTACTGTGAGTCATTCACCCAATGAGC 1 ATGAATGAGCCACTAGACTATTTAGCAAATGCTTCTGATTTCCCCGATTATGCAGCTGCT Gaps ; 0 Length 1851; 0, Indels 100.0%; Score 1014; DB 6; 100.0%; Pred. No. 2.9e-257; Patent: WO 02055702-A 7 18-JUL-2002; Curagen Corporation (US) Location/Qualifiers 0; Mismatches /organism="Homo sapiens" /mol_type="unassigned DNA" /db_xref="taxon:9606" AX661905.1 GI:29162960 Homo sapiens (human) hes 1014; Conservative Homo sapiens Similarity same E01 947 587 647 421 827 541 887 661 61 181 301 361 121 ES NISM NCE N SO g à 셤 Ŋ

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Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                 CTGTATCTGACCAGCCTCCCCTTCCTGATTCACTATGCCAGTGGCGAAAACTGGATC
                                                                                       CIGTATUTE CAGCCTCCCTTCCTGATTCACTATGCCAGTGCCAGAAAACTGGATC
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TTIIHTHTGLISCELROSTREENTILLLIAFTVCFLPFHILKVIR IESRILSSISCSI
ENQIHEAYIVSRPLAALNIFGNLLLVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYS
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Catarrhini; Hominidae;
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/mol type="unassigned DNA"
/db_rref="taxon:9606"
1. 1014
/note="unnamed protein product"
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Patent: WO 2004029626-A 1 08-APR-2004;
Bayer HealthCare AG (DE)
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/db_xref="taxon:9606"

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Sequence 1 from Patent W00187980.
AX379468 AX379468.1 GI:19575226
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                        1. .1014
/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
Arena Pharmaceuticals, Inc.
Location/Qualifiers
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99.8%; Score 1012.4; DB 6
Best Local Similarity 99.9%; Pred. No. 7.4e-257;
Matches 1013; Conservative 0; Mismatches 1; DNA

| | 421 TGCTTTTCCATTCACAAACTCGATGTGCAGTTGTAGCCTGTGCTGGTGTGGATCATT 480 421 TGCTTTTCCATTCACAAAACTCGATGTGCAGTTGTAGCCTGTGGTGTGGATCATT 480 481 TGCTTTTCCATTCACAAACTCGATGTGCAGTGTGTAGCCTGTGGTGTGGATCATT 480 481 TCACTGGTAGCTGTCATTCCGATGACCTTCTTGATCAACCAAC | 601 ATTTGACTGCAACTACTTTCTGCCTCCCCTTGGTGATAGTGACACTTTGCTATACCACG 660 601 ATTTTGACTGCAACTACTTTCTGCCTCCCCTTGGTGATAGTGACACTTTGCTATACCACG 660 661 ATTATCCACCACTGCACCCATGGACTGCAAACTGACGACTGCAAAGCACGA 720 661 ATTATCCACCACTGTGCCCATGGACTGCAAACTGACGACTGCCTTAAGCAGAAAGCACGA 720 661 ATTATCCACCACTGTGACCCATGGACTGCAAACTGACGCTTCAAGCAGAAAGCACGA 720 721 AGGCTAACCATTCTGCTACTCCTTGCAATTTTTACGTATTTTTTACCCTTCCATATCTTG 780 721 AGGCTAAACATTCTGCTACTCCTTGCATTTTTACGTATTTTTACCTTCCTT | | AX549361 N Sequence 646 from Patent W002061087. N AX549361. AX549361.1 G1:25813991 Homo sapiens (human) SM Homo sapiens (human) SM Homo sapiens (human) E Ukaryota; Merazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. E J Burmer, G.C., Roush, C.L. and Brown, J.P. Antigenic peptides, such as for G protein-coupled receptors (GPCRs), antibodies thereto, and systems for identifying such antigenic peptides L Patent: W0 02061087-A 646 08-AUG-2002; |
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| 8 8 8 8 8 8 | 8 8 8 8 8 | 8 8 8 8 8 | 6 6 6 6 6 6 6 | RESULT 10 AX549161 LOCUS DEFINITION ACCESSION VERYORDS SOURCE ORGANISM REFERENCE AUTHORS TITLE |
| Oy 541 TCAGCCTGTCTCGACCTCACTACTACTATTAAGTGGTACAACCTA 600 bb 541 TCAGCCTGTCTCGACCTCACTACGATGAACTCATATTAAGTGGTACACCTA 600 col ATTTTGACCTGCACTACTTTCTGGCTCCCCTTGGTGATACTTTGCTATACCACG 600 do 601 ATTTTGACTGCAACTACTTTCTGCCTCCCCTTGGTGATAGTGACACTTTGCTATACCACG 600 do ATTTTGACTGCAACTACTTTCTGCCTCCCCTTGGTGATAGTGACACTTTGCTATACCACG 600 do ATTTTCACACTCTGACCATGGACTGCAACTGACAGCTGCCTTAAGCAGAAACCACG 600 do ATTATCCACACTCTGACCATGGAACTGCAAACTGAACTG | 781 AGGGTCATTCGAATCTCGCTGCTTTCAATCAGTGTTCCATTGAGAATCTTG 781 AGGGTCATTCGAATCTCGCCTGCTTTCAATCAGTTGTTCCATTGAGAATCTGGATCTTCAATCAGTTGTTCCATTGAGAATCTGGATCTTCCATTGAGAATCTGAGATCTGATCAGTTGTTCCATTGAGAATCTGATCAGTTGATCAGTTGATCAGTTGATCAGTTAGATCAGATCGAATCTGATAGATCAGTTAGATCATTTCTAGACTTAGATTAGATGATCTGAAACTTTTCAAGACTGATTAGATGATGATGATGATGATGATGATGATGATGATG | SULT 9 961 SULT 9 961 SULT 9 84411 AN FINITION SE FINITION AN ENTRY AND AND AND ADDRESSION AND AND ADDRESSION ADDRESSION AND ADDRESSION ADDRES | Homo sapiens (human) Homo sapiens (human) Homo sapiens Homo sapiens Enkaryota; Metazoa; Ch Mammalia; Eutheria; Pr. RS Ramakrishnan, S. Regulation of human p2: Regulation of h | Query Match 99.8%; Score 1012.4; DB 6; Length 1014; Best Local Similarity 99.9%; Pred. No. 7.4e-257; Gaps 0; Matches 1013; Conservative 0; Mismatches 1; Indels 0; Gaps 0; Qy 1 ATGAATGAGCCACTAGACTATTTAGCAAATGCTTCTGATTTCCCCGATTATGCAGCTGCT 60 Db 1 ATGAATGAGCACTAGACTATTTAGCAAATGCTCCAGTCACTACCTCCCTGTTATTTAT |

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Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
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Pred. No. 7.4e-257;
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Paradigm Therapeutics Limited (GB)
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/organism="Homo sapiens"
/mol_type="unassigned DNA"
/db_xref="taxon:9606"
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99.8%; Score 1012.4; DB 6; Length 1014;
Best Local Similarity 99.9%; Pred. No. 7.4e-257;
Matches 1013; Conservative 0; Mismatches 1; Indels 0;
                                                                                                                       /mol_type="unassigned DNA"
/db_xref="taxon:9606"
                                                                        1. .1014
/organism="Homo sapiens"
                   Biosciences, Inc. (US)
Location/Qualifiers
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PN JP 200112793-A/7
PD 16-APR-2002
PP 16-PEB-2001 JP 2001034434
PP 09-PEB-2001 JP 2001034434
PI TATSUYA HAGA, SHIGEKI TAKEDA, NARIKI MIYAKE
PC C12N15/09, A01K67/027, A61K38/00, A61K39/395, A61K39/00, PC
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1 (Dases 1 to 1014)

Haga, T., Takeda, S. and Miyake, N.

Novel G-protein coupled receptors
Patent: JP 202112793-A 7 16-PRP-2002;
JAPAN SCIENCE AND TECHNOLOGY CORP
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TCAGCCTGTCTCGACCTCACCAGTTCGGATGAACTCAATACTATTAAGTGGTACAACCTG
                      601 ATTITGACTGCAACTACTITCTGCCTCCCCTTGGTGATAGTGACACTTTGCTATACCACG
                                     781 AGGGTCATTCGGATCGAATCTCGCCTGCTTTCAATCAGTTGTTCCATTGAGAATCAGATC
                                                                                                                                                                                         CATGAAGCTTACATCGTTTCTAGACCATTAGCTGCTCTGAACACCTTTGGTAACCTGTTA
                                                                                                                                                                                                                                        PC C12N5/10, C12Q1/02, C12Q1/68, G01N33/15, G01N33/59, G01N33/53, G01N33/56//

PC C12P21/08, C12N15/00, A61K37/02, C12N5/00

CC Novel G-protein coupled receptors
FH Key (1). (1014).
                                                                      661 ATTATCCACACTCTGACCCATGGACTGCAAACTGACAGCTGCCTTAAGCAGAAAGCACGA
                                                                                                                            TTTACCCTTCCATATCTTG
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99.8%; Score 1012.4; DB 6; Length 1014;
Best Local Similarity 99.9%; Pred. No. 7.4e-257;
Matches 1013; Conservative 0; Mismatches 1; Indels 0;
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Location/Qualifiers
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Novel G-protein coupled receptors.
BD144282
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/db xref="taxon:9606"
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JP 2002112793-A/7.
Homo sapiens (human)
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AUTHORS
TITLE
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120 180 180 CIGTATCIGACCAGCCTCCCCTTCCTGATTCACTACTATGCCAGTGGCGAAAACTGGATC 300 540 300 360 360 420 009 099 480 480 099 720 720 840 420 780 780 840 900 900 960 960 9 9 61 TITGGAAATIGCACIGAIGAAAACAICCCACICAAGAIGCACIACCICCCIGIIAITAI 181 AAAATGAGACCTTGGAAGAGCACCATCATTATGCTGAACCTGGACCTGCACAGATCTG 421 TGCTTTTCCATTCACAAAACTCGATGTGCAGTTGTAGCCTGTGCTGTGGTGTGGATCATT 1 ATGAATGAGCCACTAGACTATTTAGCAAATGCTTCTGATTTCCCCGATTATGCAGCTGCT 181 AAAATGAGACCTTGGAAGAGCAGCACCATCATTATGCTGAACCTGGCCTGCACAGATCTG 241 CIGIAICTGACCAGCCTCCCCTTCCTGATTCACTATGCCAGTGGCGAAAAACTGGATC 61 TITGGAAATIGCACTGAAAAAAAACATCCCACTCAAGATGCACTACCTCCCTGTTATTAT 121 GGCATTATCTTCCTCGTGGGATTTTCCAGGCAATGCAGTAGTGATATCCACTTACATTTTC TITGGAGATITCATGIGIAAGITTATCCGCTTCAGCTTCCATTTCAACCTGTATAGCAGC 301 ITTGGAGATITCATGTGTAAGTTTATCCGCTTCAGCTTCCATTTCAACCTGTATAGCAGC TCAGCCTGTCTCGACCTCACCAGTTCGGATGAACTCAATACTATTAAGTGGTACAACCTA 601 ATTITICACTICCAACTACTITICTICCTCCCCTTIGGTGATAGTGACACTTTGCTATACCACG 721 AGGCTAACCATTCTGCTACTCCTTGCATTTTTACGTATGTTTTTTACCCTTCCATATCTTG AGGGTCATTCGGATCTCGCTGCTTTCAATCAGTTGCTTCCATTGAGAATCAGATC AGGCTAACCATTCTGCTACTCCTTGCATTTTACGTATGTTTTTTACCCTTCCATATCTTG ATCCTCTTCCTCACCTGTTTCAGCATCTTCCGCTACTGTGTGATCATTCACCCAATGAGC 361 Arccretrerederirreagearerregeraciereragareareaceeareae TGCTTTTCCATTCACAAAACTCGATGTGCAGTTGTAGCCTGTGCTGTGGTGTGGATCATT ATTATCCACACTCTGACCCATGGACTGCAAACTGACAGCTGCCTTAAGCAGAAAGCACGA 781 AGGSTCATTCGGATCGAATCTCGCCTGCTTTCAATCAGTTGCTTCCATTGAGAATCAGATC CATGAAGCTTACATCGTTTCTAGACCATTAGCTGCTCTGAACACCTTTGGTAACCTGTTA CTATATGTGGTGGTGGGGACAACTTTCAGCAGGCTGTCTGCTCAACAGTGAGATGCAAA GTAAGCGGGAACCTTGAGCAAGCAAAGAAATTAGTTACTCAAACAACCCTTGA 1014

PRI 24-MAY-2002

linear

DNA

1014 bp

AB083598

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Gaps

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Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
1 (Bases I to 1014)
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Direct Submission
Submitted (17-A7G-2001) Department of Pharmacology, University of Toronto, 8 Taddle Creek Rd. Rm. 4353, Toronto, Ont M5S 1A8, Canada
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Homo sapiens G protein-coupled receptor (GPR80) gene, complete cds.
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LVGFPGNAVVISTYIFKMFPHKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFG
DFNCKFIRPSFHFNLYSSILFUTCFSIFRYCVIIHPNSCFSIHKTRCAVVACAVVMII
SLVAVIPMTFLITSTNRTNRSACLDLTSSDELNTIKWYNLILTATTFCLPLVIVTLCY
TTIIHTLTHGLQTDSCLKQKARRLTILLLLAFYVCFLPFHIRVIRLESRLLSISCSI
ENQIHEAYIVSRPLAALNTFGNLLLYVVVSDNFQQAVCSTVRCKVSGNLEGAKKISYS
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Identification of G protein-coupled receptor genes from the human
                                                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Primates, Catarrhini, Hominidae, Homo
                                                                                                                                                                                                                                                                                  Takeda,S., Kadowaki,S., Haga,T., Takaesu,H. and Mitaku,S.
Direct Submission
Submitted (10-APR-2002) Shigeki Takeda, Gunma University,
Department of Biological and Chemical, Engineering, Faculty of
Engineering, 1-5-1, Kiryu, Gunma 376-8515, Japan
(E-mail:stakeda@bce_gunma-u.ac.jp, Tel:+81-277-30-1434,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           1 ATGAATGAGCCACTAGACTATTTAGCAAATGCTTCTGATTTCCCCGATTATGCAGCTGCT
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Homo sapiens GPCR gene for putative G-protein coupled receptor, complete CDS, clone:hGPCR16.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 /product="putative G-protein coupled receptor"
/protein_id="BAB89311.1"
/db_xref="G1:20152260"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /organism="Homo sapiens"
/mol_type="genomic DNA"
/db_xref="taxon:9606"
/clone="hGPCR16"
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/gene="GPCR"
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/gene="GPCR"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /mol_type="unassigned DNA"
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the 5-prime and 3-prime ends, generated by PCR"
                                                                                                                                                                                                                                                                                                                                      961 GTAAGCGGGAACCTTGAGCAAGCAAAGAAAATTAGTTACTCAAACAACCCTTGA 1014
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/organism="synthetic construct"
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Patent: WO 02088183-A 7 07-NOV-2002;
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Sequence 7 from Patent WO02088183.
AX593346
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Location/Qualifiers
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ENGIHBAXIVSRPLAALNTFGNLLLYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYS
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/chromosome="13"
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                                                                                                                                                     gene="GPR80"
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310 TITGGAGATITCATGIGIAAGITITATCCGCTICAGCTICCATITCAACCTGTATAGCAGC 369
                                                                                                                                               TCAGCCTGTCTCGACCTCACCAGTTCGGATGAACTCAATACTATTAAGTGGTACAACCTA 600
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Search completed: November 1, 2004, 20:34:14 Job time : 4529 secs

GenCore version 5.1.6 Copyright (c) 1993 - 2004 Compugen Ltd.

OM nucleic - nucleic search, using sw model

November 1, 2004, 18:05:01; Search time 3740 Seconds (without alignments) 9879.649 Million cell updates/sec Run on:

US-10-763-B54-1 1014 1 atgaatgagccactagacta.....gttactcaaacaacccttga 1014 Title: Perfect score: Sequence:

Scoring table:

IDENTITY NUC Gapop 10.0 , Gapext 1.0

32822875 seqs, 18219865908 residues Searched:

65645750 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database :

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gb_est2:: *
gb_est4:: *
gb_est5:: *
gb_est5:: *
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

| | Description | AY404079 Homo sabi | | | _ | BM723768 UI-E-E01- | CN511791 AGENCOURT | | | | - | | Mus | AY413139 Homo sapi | | | CE050774 tigr-qss- | | CD217676 pgr1n.pk0 | CF288290 AGENCOURT | CN210812 RJA041C08 | BX704227 BX704227 | B0038875 pgn1c.pk0 | | CB616018 AMGNNUC:N |
|-----------|--------------------------|--------------------|----------|----------|----------|--------------------|--------------------|----------|----------|----------|----------|----------|----------|--------------------|----------|----------|--------------------|----------|--------------------|--------------------|--------------------|-------------------|--------------------|----------|--------------------|
| SUMMARIES | ID | AY404079 | AY404080 | AY404081 | CC579146 | BM723768 | CN511791 | CA385979 | CA384807 | AK030759 | AY413141 | AK033660 | AK036611 | AY413139 | CF284315 | CA367446 | CE050774 | CF147800 | CD217676 | CF288290 | CN210812 | BX704227 | BQ038875 | CO725980 | CB616018 |
| | DB | . 6 | σ | σ | σ | 4 | 7 | 9 | 9 | m | σ | ٣ | ٣ | 6 | ø | φ | σ | 9 | 9 | ø | 7 | 2 | 'n | 7 | 9 |
| | Query Match Length DB | 1014 | 1005 | 1014 | 870 | 744 | 800 | 725 | 681 | 3613 | 1122 | 2203 | 3888 | 1122 | 781 | 494 | 193 | 712 | 693 | 722 | 1815 | 925 | 623 | 987 | 569 |
| oA | Query Match | 99.8 | 93.2 | 72.5 | 37.6 | 24.0 | 18.7 | 18.3 | 17.3 | 15.3 | 15.2 | 15.2 | 15.2 | 14.7 | 14.6 | 14.6 | 14.3 | 13.8 | 13.1 | 12.9 | 12.8 | 12.7 | 12.5 | 12.4 | 12.1 |
| | Score | 1012.4 | 944.6 | 735.6 | 381.6 | 243 | 189.6 | 185.8 | 175.4 | 155.4 | 153.8 | 153.8 | 153.8 | 148.6 | 147.8 | 147.6 | 144.8 | 140.4 | 133.2 | 131 | 129.4 | 129 | 126.6 | 125.8 | 123 |
| | Result No. | | 7 | 3 | 4 | വ | 9 | 7 | 80 | σ | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |

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1 ATGAATGAGCCACTAGACTATTTAGCAAATGCTTCTGATTTCCCCGATTATGCAGCTGCT

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| 16.5 5 BX740173 18.9 3 AXC101340 52.7 CN839909 11.1 5 BQ396255 11.1 5 BQ396255 12.1 5 BQ396255 13.1 5 BX227630 13.1 5 BX227630 13.2 6 CD246161 13.3 6 CD246161 13.4 BM426517 13.5 CN218920 13.7 CN218920 14.8 BG712193 15.6 BU141159 16.7 CN3186194 17.7 CN3186194 18.7 CN3186194 19.7 CN3186194 19.7 CN3186194 19.7 CN3186194 19.7 CN3186194 19.7 CN36186194 19.7 CN36186194 19.7 CN36186194 19.8 AKO808666 10.8 AKO808666 10.8 AKO80866 | らりろてらこららすするりてらすててこまろ | らりろてらよららなするりでらまててよるの | 845 5 44118 9 44118 9 862 7 641 5 651 5 601 5 868 6 1101 9 603 7 770 5 840 7 720 1 1582 3 2542 3 |
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| | 9 1 4 9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | H4 H H0 | 0.88 |

ALIGNMENTS

RESULT 1

| AY404079 | |
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| | |
| DEFINITION HO | Homo sapiens GPR80 gene, VIRTUAL TRANSCRIPT, partial sequence, genomic survey sequence. |
| NO | AY404079 |
| | AY404079.1 GI:39760062 |
| KEYWORDS GE SOURCE HC | GSS. Homo sapiens (himap) |
| MISM | |
| | Chordata; |
| | Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo. |
| | 1 (bases 1 to 1014) |
| AUTHORS CI | lark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., |
| ĭ | Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., |
| F. | rerriera,S., Wang,G., Zheng,X.H., White,T.J., Shinsky,J.J., |
| TITLE | Adding, N.D. and Cargiil, M. Inferring nonneutral evolution from human-chimp-mouse orthologous |
| | dene trios |
| JOURNAL SC | Science 302 (5652), 1960-1963 (2003) |
| | 14671302 |
| | 2 (bases 1 to 1014) |
| AUTHORS CI | Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., |
| ΣŢ | odd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., |
| Fe | Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., |
| | dams, M.D. and Cargill, M. |
| | Direct Submission |
| JOURNAL SU | Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive, |
| | |
| COMMENT | This sequence was made by sequencing genomic exons and ordering them based on alignment. |
| FEATURES | Location/Qualifiers |
| source | 11014 |
| | /organism="Homo sapiens" |
| | /mol_type="genomic_DNA" |
| | /db_xrei="taxon:9606" |
| gene | <1>1014 /************************************ |
| | /gene="Grk80" |
| MISTO | /iocus_tag="HCM1//1" |
| ORIGIN | |
| Query Match | 99.8%; Score 1012.4; DB 9; Length 1014; |
| Matches 1013; | 77.3%; vative O |
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Pan troglodytes (chimpanzee)
Pan troglodytes
AY404080.1 GI:39760063 GSS.
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JOURNAL
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SOURCE
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                                    ATTATCCACACTCTGACCCATGGACTGCAACTGACAGCTGCCTTAAGCAGAAAGCACGA
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                                                                                                                                                                                                                                         ATCCTCTTCCTCACCTGTTTCAGCATCTTCCGCTACTGTGTGATCATTCACCCAATGAGC
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    ATGAATGAGCCACTAGACTATTTAGCAATGCTTCTGATTTCCCCGGATTATGCAGCTGCT
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AY404080 1005 bp DNA linear GSS 15-DEC-2003 Pan troglodytes GPR80 gene, VIRTUAL TRANSCRIPT, partial sequence, genomic survey sequence.
AX404080

DEFINITION

RESULT 2 AY404080

ö 489 Arreacaaaacrecardrecaerreradecrerecereredagaecrarreceredaa 480 120 309 420 549 129 189 Trecrennnegartrecannnnainnngragegararecaetracartrecaaargnna 180 249 240 300 369 360 429 69 9 Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi, Mamalia, Eutheria, Primates, Catarrhini, Hominidae, Pan.

1 (bases 1 to 1005)
Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M. Inferring nonneutral evolution from human-chimp-mouse orthologous Submitted (16-NOV-2003) Celera Genomics, 45 West Gude Drive, Rockville, MD 20850, USA This sequence exquence and ordering them based on alignment. CTCACCTGTTTCAGCATCTTCCGCTACTGTGATCATTCACCCAATGAGCTGCTTTTCC ATTCACAAAACTCGATGTGCAGTTGTAGCCTGTGGTGGTGGATCATTTCACTGGTA CCACTAGACTATTTAGCANNNNNTTCTGATTTCCCCGATTATGCAGCTGCTTTTGGAAAT ACCAGCCTCCCCTTCCTGATTCACTACTATGCCAGTGGCGAAAACTGGATCTTTGGAGAT TICATGRANGSTITATCCGCTTCAGCTTCCATTTCAACCTGTATAGCAGCATCCTTC recacreargaaaaararccacreaagarenneraccreecrnnnarcraregearrare TICCICGIGGGATITICCAGGCAATGCAGTAGTGATATCCACTTACATTTTCAAAATGAGA CCTTGGAAGAGCACCATCATTATGCTGAACCTGGCCTGCACAGATCTGCTGTATCTG TICATGIGIAAGITIAICCGCTICAGCTICCATTICAACCIGIATAGCAGCAICCTIC CTCACCTGTTTCAGCATCTTCCGCTACTGTGATCATTCACCCAATGAGCTGCTTTTCC Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M. CCACTAGACTATTTAGCAAATGCTTCTGATTTCCCCGATTATGCAGCTGCTTTTGGAAAT ô Length 1005; Indels 93.2%; Score 944.6; DB 9; 94.2%; Pred. No. 2.9e-261; ive 0; Mismatches 58; /organism="Pan troglodytes" Science 302 (5652), 1960-1963 (2003) /mol_type="genomic_DNA" /db_xref="taxon:9598" /gene="GPR80" /locus_tag="HCM1771" Location/Qualifiers ; (bases 1 to 1005) .>1005 Matches 947; Conservative j. .1005 Similarity gene trios 14671302 430 421 490 361 ద ò g Š

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| | | 301 TTTGGAGATTTCATGTGTAAGTTTATCCGCTTCAGCTTCCATTTCAACCTGTATAGCAGC | Qy 421 TGCTTTCCATCATGAAACTCGATGTAGCTGTGCTGGGGTGGGATCATT 480 | Db 541 | 721 AGGCTAACCATTCTGCTACTCCTTGCATTTACGTATGTTTTTTACCCTTCCAT [| VY 961 GTAGGGGGGAGCTTGGGGGAAATTAGTTACTCAACAACCTTGA 1014 |
|---|--|--|--|----------|--|---|
| Db 481 GCTGTCATTCCGATGACCTTCTTGATCACCACCACCACCACCACCACCACCTGT 540 | | QY 910 GTGGTCAGCAACTTTCAGCAGGCTGTCTGCTCAACAGTGAAATAAGCGGG 969 Db | AY404081 LOCUS AY404081 LOCUS BETINITION Mus musculus GPR80 gene, VIRTUAL TRANSCRIPT, partial sequence, ACCESSION AY404081. VERSION AY404081.1 GI:39760064 SOURCE Mus musculus (house mouse) ORGANISM Mus musculus | | . o | /gen |

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/tissue_type="fetal sep"
/dev stage="fetal"
/dev stage="fetal"
/lab_host="DH10B (life Technologies) (T1 phage resistant)"
/lab_host="DH10B (life Technologies) (T1 phage resistant)"
/clone lib="U11 B-BO1"
/note="Organ: eye; Vector: pT7H3-Pac (Pharmacia) with a modified polyllinker; Site_1: Book I; Site_2: Not I; U1-B-BO1 is a normalized cDNA library containing the following tissue(s): fetal eye. The library was
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   BM723768 11-E-E01-aix-g-16-0-UI.rl UI-E-E01 Homo sapiens cDNA clone UI-E-E01-aix-g-16-0-UI 5', mRNA sequence.
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                                                                                                                                                                                                                                                                                                                                 359 GCATCCTCCTCCTCACCTGTTTCAGCATCTTCCGCTACTGTGTGATCATTCACCCAATGA 418
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
I (bases 1 to 744)

Bonaldo, M.F., Lennon, G. and Soares, M.B.
Normalization and subtraction: two approaches to facilitate gene
                     TCAAAATGAGACCTTGGAAGAGCAGCACCATCATTATGCTGAACCTGGCCTGCACAGATC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         479 TITCACTGGTAGCTGTCATTCCGATGACCTTCTTGATCACATCAACAG 530
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    University of Iowa 375 Newton Road, 4156 MEBRF, Iowa City, IA 52242, USA Tel: 319 335 9565 Email: bento-soares@uiowa.edu
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Contact: Soares, MB
Coordinated Laboratory for Computational Genomics
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/clone="UI-E-EQ1-aix-g-16-0-UI"
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                                                                                                   870 bNA linear GSS 18-JUN-2003 CH240 458M22.T7 CHORI-240 Bos taurus genomic clone CH240_458M22, genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         (http://www.chori.org/bacpac/ordering_information.htm). This work was undertaken as part of the International Bovine BAC Mapping Consortium (IBBMC) by CSIRO Livestock Industries, Australia and the British Columbia Genome Sciences Centre, Canada.
                                                                                                                                                                                                                                                                                                                                                                                                               Holt,R., Stott,J., Yang,G., Barber,S., Smailus,D., Prabhu,A.-L., Holt,R., Stott,J., Yang,G., Barber,S., Smailus,D., Prabhu,A.-L., Halt,R., Cloutier,A., Lee,D., Girn,N., Olson,T., Mayo,M., Butterfield,Y., Kirkpatrick,R., Liu,J., Guin,R., Chan,A., Mathewson,C., Wye,N., Masson,A., Brown-John,M., Jones,S., Schein,J., Marra,M., de Jong,P., Keele,J.W. and Kappes,S.M. Bovine BAC End Sequences from Library CHORI-240, PLATES 399 to 478 Unpublished (2003)
Other GSSs: CH240_458M22.TARBACI3P2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   The British Columbia Cancer Agency Genome Science Centre 600 W. 10th Ave, Vancouver, British Columbia, Canada VSZ 4E6 600 W. 10th Ave, Vancouver, British Columbia, Canada VSZ 4E6 E1 604-877-6276

Email: rholt@bcgsc.ca
Clones are derived from the bovine BAC library CHORI-240 (http://www.chori.org/bacpac/bovine240.htm). For BAC library availability, please contact Pleter de Jong (pdejong@mail.cho.org).

Clones may be purchased from BACPAC Resources
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          339 ATGAATGAGCCACTAGATGATTTTGCAAATGCCTCTGATTTCCCTGATTATGTCAGCTGC 398
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                                                                                                                                                                                                                                                                                                                                            Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Cetartiodactyla, Ruminantia, Pecora, Bovidae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                /cell_type="Blood"
/colne_lib="CHGRI-240"
/note="Vector: pTARBACI.3; Site_1: MboI; Site_2: MboI;
Hereford bull il Domino 99375; CHGRI-240 Bovine BAC
library (Male) produced by Pieter de Jong"
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961 GCCAGCGGGGACCTTGAACAAGGAAAGAAGACAGTTGCTCAAACAACCTTGA 1014
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/mol_type="genomic DNA"
/strain="breed: Hereford"
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/clone="CH240_458M22"
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84.8%;
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Bos taurus
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Genome Research, 6:791-806, 1996. Pirst strand cDNA synthesis was primed with an oligo-dT primer containing a Not I site. Double stranded cDNA was ligated to an ECOR I adaptor, digested with Not I, and cloned directionally into pT7T3-Pac vector. The oligonucleotide used to prime the synthesis of first strand cDNA contains a library tag sequence that is located between the Not I site and the (dT)18 tail. The sequence tag for this library is Discovery in the visual System, supported by National Eye Institute (NEI).
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AGENCOURT_22438125 NIH_ZGC_7 Danio rerio cDNA clone IMAGE:7269123
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Schinopterygii, Neopterygii, Teleostei, Ostariophysi,
Cypriniformes, Cyprinidae, Danio.
1 (bases 1 to 800)
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                                                                                                                                                                                                                                                                                                                                                                                                                                         772 CATATCTTGAGGGTCATTCGGATCGAATCTCGCCTTTCAATCAGTTGTTCCATTGAG
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National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
                                                                                                                                                                                                                                                                                                                                                                                                0; Gaps
constructed according to Bonaldo, Lennon and Soares,
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                                                                                                                                                                                                                                                                                                                                              Length 744;
                                                                                                                                                                                                                                                                                                                                                                                           0; Indels
                                                                                                                                                                                                                                                                                                                                       24.0%; Score 243; DB 4; I 100.0%; Pred. No. 1.4e-58;
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Bldg. 31 Rm10A07 Bethesda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Len Zon, Harvard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Contact: Daniela S. Gerhard, Ph.D. Office of Cancer Genomics
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Location/Qualifiers
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CN511791
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/doing lib="NHH 2GC 7"
/clone lib="NHH 2GC 7"
/note="Vector: pExpress1; Site_1: Not1; Site_2: EcoRV;
Bulk tissue was collected from a whole adult individual
from the Tuebingen strain. 1st strand cDNA was primed with
a Not 1 - oligo(dT) primer, double-stranded cDNA was
cloned into the Not I and EcoRV sites of pExpress-1.
Library was size-selected for >1 kb fragments and
normalized. A non-normalized version of this library is
also available (NIH_ZGC 10). Library was constructed by
Open Biosystems (Huntsville, AL)"
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                                                                                                                                                                                                                                                                                                                                                                                                        Score 189.6; DB 7; Length 800;
Pred. No. 3.7e-43;
0; Mismatches 330; Indels 3.
/mol_type="mRNA"
/db_xref="taxon:7955"
/Clone="IMAGE:7269123"
/tissue_type="whole body"
/lab_host="DH10B"
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Best Local Similarity 54.6%;
Matches 400; Conservative C
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698 GCTGCCTTAAGCAGAAAGCACGAAGGCTAACCATTCTGCTACTCCTTGCATTTTACGTAT 757
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  CTCTGAACACCTTTGGTAACCTGTTACTATATGTGGTGGTCAGCGACAACTTTCAGCAGG 934
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata, Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Euteleostei; Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus. [ (bases 1 to 681) E. (keele, J. W., Karamycheva, S., Brown, G., Koop, B., Gahr. S.A., Palti, Y. and Quackenbush, J. Salmonidae; Sequence analysis of a rainbow trout cDNA library and creation of
                                                                                                TAGTGACACTTTGCTATACCACGATTATCCACACTCTGACCCATGGACTGCAAACTGACA 697
                                                                                                                                                                                                                                                                                                                                                                       GITITITACCCTICCATATCTIGAGGGICATICGGAICGAATCTCGCCT---GCTITCAA 814
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           815 TCAGTTGTTCCATTGAGAATCAGATCCATGAAGCTTACATCGTTTCTAGACCATTAGCTG 874
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Single pass sequencing. Bases called with phred v0.020425.c and
trimmed with the aid of the trim_alt option. Vector identified by
cross match v0.390329.
Seq primer: AGCGGATAACAATTTCACACAGGA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          665541 NCCCWA 1RT Oncorhynchus mykiss cDNA clone 1RT139J14 D E07
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11876 Leetown Road, Kearneysville, WV 25430, USA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      /clone_lib="NCCCWA 1RT"
/note="Vector: pCWV SPORTS, Site_1: NotI; Site_2:
Library made from pooled tissue from brain, gill,
spleen, muscle, and kidney."
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Score 175.4; DB 6; Length 681;
Pred. No. 4.5e-39;
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Contact: Rexroad CE
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Oncorhynchus mykiss
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/db_xref="taxon:8022"
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/clone="1RT139J14_D_EC
/tissue_type="pooled"
/lab_host="DH10B"
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Fax: 304 725 0351
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59.6%;
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                                                                                                          EST 06-NOV-2002
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Single pass sequencing. Bases called with phred v0.020425.c and trimmed with the aid of the trim_alt option. Vector identified by cross match v0.990329.

Seq primer: AGGGARAAATTCACACAGGA.

Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                              Eukaryota; Metazoa, Chordata, Craniata, Vertebrata; Euteleostomi, Actinopterygii; Neopterygii; Teleostei; Euteleostei; Frotacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus. 1 (bases 1 to 725)
Rexroad, C.E. Jard, Lee, Y., Keele, J.W., Karamycheva, S., Brown, G., Koop, B., Gahr, S.A., Palti, Y. and Quackenbush, J. Sequence analysis of a rainbow trout cDNA library and creation of
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   /lab_hogt="DH10B"
/clone lib="NGCCWA 1RT"
/note="Vector: pCCW SPORT6; Site 1: Not1; Site 2: Sal1;
Library made from pooled tissue from brain, gill, liver,
spleen, muscle, and kidney."
                                                                                                          CA385979 725 bp mRNA linear EST 06-NOV-20
667487 NCCCWA 1RT Oncorhynchus mykiss cDNA clone 1RT136006_C_H03
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Contact: Rexroad CE
USDA, ARS, National Center for Cool and Cold Water Aquaculture
11876 Leetown Road, Kearneysville, WV 25430, USA
Tel: 304 724 8340 x2129
Fax: 304 725 0351
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Email: crexroad@ncccwa.ars.usda.gov
                                                                                                                                                                                                                                                                                                                  Oncorhynchus mykiss (rainbow trout)
Oncorhynchus mykiss
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/db_xref="taxon:8022"
/clone="1RT136006_C_HC
/tissue_type="pooled"
                                                                                                                                                                                                              CA385979
CA385979.1 GI:24712978
                                                                                                                                                                              mRNA sequence.
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Group phase I & II Temm and the Kiken Genome Exploration Research Analysis of the mouse transcriptome based on functional annotation of 60,770 full-length cDNAs

Nature 420, 563-573 (2002)

E (bases 1 to 3613)

Radchi, J., Aizawa, K., Akimura, T., Arakawa, T., Bono, H., Carninci, P., Fukuda, S., Furuno, M., Hanagaki, T., Hiramoto, K., Hiramota, T., Hirozane, T., Horis, T., Imotani, K., Ishii, Y., Itch, M., Kagawa, I., Kasukawa, T., Katoh, H., Kawai, J., Kojima, Y., Kondo, S., Konno, H., Kouda, M., Nakami, J., Kojima, Y., Kondo, S., Konno, H., Kouda, M., Nakami, J., Nishi, K., Nomura, K., Numazaki, R., Ohno, M., Ohsato, N., Okazaki, Y., Saito, R., Sakai, K., Sakazume, N., Sakai, C., Sakai, K., Sakai, K., Sakaich, Sagabo, Y., Tagama, M., Tagawa, A., Takahashi, F., Takaku-Akahira, S., Muramatsu, M., and Hayashizaki, Y., Toya, T., Yasunishi, A., Muramatsu, M., and Hayashizaki, Y., Toya, T., Yasunishi, A., Direct Submission
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/tissue type="whole body"
/clone_1ib="RIKEN full-length enriched mouse cDNA library"
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TKTGFQFYYLPAVYILVFIIGFLGNSVAIWMYVFHWKPWSGISVYMFNLALADFLYVL
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GRLKKKNAIYVSVLVWLIVVVAISPILFYSGTGTRKNKTVTCYDTTSNDYLRRYFIYS
MCTTVAMFCIPLVLILGCYGLIVKALIYNDLDNSPLRRKSIYLVIIVLTVFAVSYIPF
HVMKTWNLRARLDFQTPEMCDFNDRVYATYQVTRGLASLNSCVDPILYFLAGDTFRRR
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                                                                                                                                                                                                                            The RIKEN Genome Exploration Research Group Phase II Team and the
                                                                                                                                                                                                                                                                                                                                                                          The FANTOM Consortium and the RIKEN Genome Exploration Research
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokoham Kanagawa 230-0045, Japan (B-mail:genome-res@gsc.riken.jp, URL:http://genome.gsc.riken.jp, Tel:81-45-503-9222,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /note="unnamed protein product; P2Y PURINOCEPTOR 1
(SWISSPROT|P49650, evidence: FASTY, 100%ID, 100%length,
               Okazaki,Y., Muramatsu,M., Inoue,Y., Kira,A. and Hayashizaki,Y. RIKBN integrated sequence analysis (RISA) system--384-format sequencing pipeline with 384 multicapillary sequencer Genome Res. 10 (11), 1757-1771 (2000)
                                                                                                                                                                                                                                                                                        Functional annotation of a full-length mouse cDNA collection
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Please visit our web site for further details.
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/db_xref="taxon:10090"
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URL:http://fantom.gsc.riken.jp/
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/strain="C57BL/6J"
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3613 bp mRNA linear HTC 03-APR-2004 Mus musculus 8 days embryo whole body CDNA, RIKEN full-length enriched library, clone:5730548K21 product:P2Y PURINOCEPTOR 1, full
                                                        111 AACTÓCACCAATGTGGACACCCTGATGAACGCTACTACTGCCCGTCATGTACAGCATA 170
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                                                                                                                                                                          127 ATCTICCTCGIGGGATTICCAGGCAAIGCAGIAGIGATAICCACITACATTICAAAAIG 186
                                                                                                                                                                                                                                     171 ATTTTCGTTGTGGGGCTGCTGGGTAACGTCACCTCCATCGCCATCTACCTGATCAAGCTA 230
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
                                                                                                                                                                                                                                                                                                                                                                                                                      247 CIGACCAGCCICCCCTICCIGAITCACTACTATGCCAGIGGCGAAAACTGGAICTIIGGA
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   0; Mismatches 201; Indels
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ligh-efficiency full-length cDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
99279253
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                                                                                                                                                                                                                                           Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Musinae; Mus. 1 (bases 1 to 1122) Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferrieras, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M.
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This sequence was made by sequencing genomic exons and ordering them based on alignment.
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                                                                                                                                                                                                                                                                                                                                         82 AACATCCCACTCAAGATGCACTACCTCCCTGTTATTTATGGCATTATCTTCCTCGTGGGA 141
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                                                                                                                                                                                                                                                                                                                                                                                                                782 AAGACCGGTTTCCAGTTCTACTACCTGCCGGCTGTCTACATTTTAGTGTTCATCATAGGC 841
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITCCAGGCAATGCAGTAGTGATATCCACTTACATTTTCAAAATGAGACCTTGGAAGAGC 201
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              AGCACCATCATTATGCTGAACCTGGCCTGCACAGATCTGCTGTATCTGACCAGCCTCCCC 261
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                                                                                                                                                                                              Score 155.4; DB 3; Length 3613;
Pred. No. 4.8e-33;
                                                                                                                                                                                                                                                                  0; Mismatches 411; Indels
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                      /note="putative"
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/note="putative"
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Best Local Similarity 50.6%;
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                                                           polyA_site
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Submitted (16-JUL-2001) Yoshihide Hayashizaki, The Institute of Physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Submiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:genome-res@gsc.riken.jp, VRL:http://genome.gsc.riken.jp/, Tel:81-45-503-9222, Fax:81-45-503-9216)

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MCTTVAMFCIPLVLILGCYGLIVKALIYNDLDNSPLRRKSIYLVIIVLTVFAVSYIPF
HVMKTMNLRARLDFQTPEMCDFNDRVYATYQVTRGLASLNSCVDPILYFLAGDTFRRR
                                                                                                                                                Group Phase I & II Team.
Analysis of the mouse transcriptome based on functional annotation
of 60,770 full-length cDNAs
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/clone_lib="RIKEN full-length enriched mouse cDNA library"
/dev_srage="adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               /translation="MTEVPWSVVPNGTDAAFLAGLGSLWGNSTVASTAAVSSSFQCAL
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TLFALIFYYFNKTDWIFGDAMCKLQRFIFHVNLYGSILFLTCISAHRYSGVVYPLKSL
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                                                                                                                 The FANTOM Consortium and the RIKEN Genome Exploration Research
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(SWISSPROT|P49650, evidence: FASTY, 100%ID, 100%length,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
   Functional annotation of a full-length mouse cDNA collection
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| db xref="raxon:10090"
| clone="9130210N15"
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/protein_id="BAC28413.1"
/db_xref="GI:26329349"
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/mol_type="mRNA"
/strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        URL:http://genome.gsc.riken.jp/
URL:http://fantom.gsc.riken.jp/
Location/Qualifiers
                                       Nature 409, 685-690 (2001)
                                                                                                                                                                                                                                                                     (2002)
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                                                                                                                                                                                                                                                             Nature 420, 563-573
6 (bases 1 to 2203)
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Best Local Similarity 50.5
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                       AGTICGGAIGAACICAAIACIAITAAGIGGIACAACCIAAITI---IGACIGCAACIACI 618
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Mus musculus adult male cecum cDNA, RIKEN full-length enriched library, clone:9130210N15 product:P2Y PURINOCEPTOR 1, full insert
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Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
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                                                                                             616 ACGTCCAATGATTACCTGCGAAGTTATTTCATCTACAGTATGTGCACGACTGTGGCCATG
                                                                                                                                                                       TTCTGCCTCCCCTTGGTGATAGTGACACTTTGCTATACCACGATTATCCACACTCTGACC
                                                                                                                                                                                                                                                                                                                    679 CATGGACTGCAAACTGACAGCTGCCTTAAGCAGAAAGCACGAAGGCTAACCATTCTGCTA
                                                                                                                                                                                                                                              TTCTGCATCCCTTTGGTGCTGATCTTGGGCTGTTATGGATTAATTGTTAAGCTTTTGATT
                                                                                                                                                                                                                                                                                                                                                                                              736 TACAATGACCTGGACAACTCTCCGCTCCGGAGAAATCCATTTACCTGGTGATAATTGTC
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High-efficiency full-length cDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
99279253
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Mus musculus (house mouse)
Mus musculus
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AK036611

Mus musculus adult male bone cDNA, RIKEN full-length enriched library, clone:9830141G17 product:PZY PURINOCEPTOR 1, full insert

AKO36611.1 GI:26331551 HTC; CAB trapper. Mus musculus (house mouse) Mus musculus

VERSION KEYWORDS SOURCE ORGANISM

ACCESSION

sequence. AK036611

LOCUS

RESULT 12 AK036611

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Shibata,K., Itoh,M., Aizawa,K., Nagaoka,S., Sasaki,N., Carninci,P., Konno,H., Akiyama,J., Nishi,K., Kitsunai,T., Tashiro,H., Itoh,M., Sumi,N., Ishii,Y., Nakamura,S., Hazama,M., Nishine,T., Harada,A., Yamamato,R., Matsuncto,H., Sakaguchi,S., Ikegami,T., Kashiwagi,K., Yoneda,Y., Ishikawa,T., Ozawa,M., Ohara,E., Watahiki,M., Yoneda,Y., Ishikawa,T., Ozawa,K., Tanaka,T., Matsuura,S., Kawai,J., Okazaki,Y., Muramatsu,M., Inoue,Y., Kira,A. and Hayashizaki,Y. RIKEN integrated sequence analysis (RISA) system-384-format Genome Res. 10 (11), 1757-1771 (2000)
                                                                                                                                                                                                                                                      Carninci,P., Shibata,Y., Hayatsu,N., Sugahara,Y., Shibata,K., Itoh,M., Konno,H., Okazaki,Y., Muramatsu,M. and Hayashizaki,Y. Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes Genome Res. 10 (10), 1617-1630 (2000)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   physical and Chemical Research (RIKEN), Laboratory for Genome Exploration Research Group, RIKEN Genomic Sciences Center (GSC), RIKEN Yokohama Institute; 1-7-22 Suehiro-cho, Tsurumi-ku, Yokohama, Kanagawa 230-0045, Japan (E-mail:genome-res@gsc.riken.jp, URL:http://genome.gsc.riken.jp/, Tel:81-45-503-9222, Fax:81-45-503-9216)
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Analysis of the mouse transcriptome based on functional annotation
of 60,770 full-length cDNAs
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Carninci, P. and Hayashizaki, Y.
High-efficiency full-length CDNA cloning
Meth. Enzymol. 303, 19-44 (1999)
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URL:http://fantom.gsc.riken.jp/
Location/Qualifiers
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6 (bases 1 to 3888)
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1384 TACAATGACCTGGACAACTCTCCGCTCCGGAGAAATCCATTTACCTGGTGATAATTGTC 1443
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1564 TATCAGGTAACAAGAGGTCTAGCAAGTCTCAACAGCTGTGTGGGACCCCATTCTTATTTC 1623
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               GSS 17-DEC-2003
              679 CATGGACTGCAAACTGACAGCTGCCTTAAGCAGAAAGCACGAAGGCTAACCATTCTGCTA 738
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi, Mammalia; Eutheria; Primates; Catarrhini, Hominidae, Homo.
1 (bases 1 to 1122)
Clark, A.G., Glanowski, S., Nielson, R., Thomas, P., Kejariwal, A., Todd, M.A., Tanenbaum, D.M., Civello, D.R., Lu, F., Murphy, B., Ferriera, S., Wang, G., Zheng, X.H., White, T.J., Sninsky, J.J., Adams, M.D. and Cargill, M. Andems, M.D. and Cargill, D. R., Lu, F. Inferring nonneutral evolution from human-chimp-mouse orthologous
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              151
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This sequence was made by sequencing genomic exons and ordering them based on alignment.
                                                                                                                                                                                                 739 CICCTIGCATTITACGIAIGITITITACCCITCCATATCTIGAGGGICATTCGGAA
                                                                                                                                                                                                                                                                                      1444 CTGACGGTGTTTGCTGTGTCTTATATCCCTTTCCATGTGAAAACGATGAAATTTGCGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                1504 GCACGGTTGGATTTCCAGACCCCAGAAATGTGTGATTTCAACGACAGGGTTTATGCCACT
                                                                                                                                                                                                                                                                                                                                                                                799 TCTCGCCTGCTTT-----CAATCAGTTGTTCCATTGAGAATCAGATCCATGAAGCT
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Clark,A.G., Glanowski,S., Nielson,R., Thomas,P., Kejariwal,A., Todd,M.A., Tanenbaum,D.M., Civello,D.R., Iu,F., Murphy,B., Ferriera,S., Wang,G., Zheng,X.H., White,T.J., Sninsky,J.J., Adams,M.D. and Cargill,M.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Homo sapiens P2RY1 gene, VIRTUAL TRANSCRIPT, partial sequence, genomic survey sequence.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                12;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      0; Mismatches 409; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Science 302 (5652), 1960-1963 (2003)
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/organism="Homo sapiens"
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/locus_tag="HCM4791"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             910 GTGGTCAGCGACAACTT 926
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GRLKKKNATYVOVLWLIVOVALSPILFYSGTGTRKNKTVTCYDTTSNDYLRSYFIYS
MCTTVAMFCIPLVILLGCYGLIVKALIYNDLDNSPIRRKSITYUIIVLTVFANSYIPF
HVMKTWALRARLDFOTPBMCDFNDRYVATYGVTRGLASLNSCVDPILYFLAGDTFRRR
LSRATRKASRRSEANLQSKSEEMTLNILSEFKQNGDTSL"
                                                                                                                                                                                                      tissue type="bone"
/clone lib="RIKEN full-length enriched mouse cDNA library"
/dev_stage="adult"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  /codon_start=1
/protein_id="BAC29506.1"
/db_xref="G1:26331552"
/translation="MTEVPMSVVPNGTDAAFLAGLGSLWGNSTVASTAAVSSSFQCAL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     TKTGFQFYYLPAVY1LVF11GFLGNSVA1WMFVFHMKPWSG1SVYMFNLALADFLYVL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1324 Trchécarccerridérecrearerresecrierrarsearraarrerrasecriridarr 1383
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             843
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            502 ATGACCTICTIGATCACATCAACCAACAGACCAACAGATCAGCCTGTCTCGACCTCACC 561
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                562 AGTICGGAIGAACTCAATACTATTAAGTGGTACAACCTAATTT---TGACTGCAACTACT 618
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CGAIGIGCAGITGIAGCCIGIGCTGIGGIGGAICAITICACIGGIAGCIGICAITICCG 501
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                                                                                                                                                                                                                                                                                                                                                                                                        /note="unnamed protein product; P2Y PURINOCEPTOR 1
(SWISSEROT|P49650, evidence: FASTY, 100%ID, 100%length,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    TITCCAGGCAATGCAGTAGTGATATCCACTTACATTTTCAAAATGAGACCTTGGAAGAGC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     82 AACATCCCACTCAAGATGCACTACCTCCCTGTTATTTATGGCATTATCTTCCTCGTGGGA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 262 ITCCTGATTCACTACTATGCCAGTGGCGAAAACTGGATCTTTGGAGATTTCATGTGTAAG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          784 AAGACCGGITICCAGTICTACTACCTGCCGGCTGTCTACATTTTAGTGTTCATCATAGGC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         844 Troctaggeaacagcgragerarcragargrresrirrecacargaageerres
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 3888;
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Pred. No. 1.4e-32;
0; Mismatches 412;
                                     /db_xref="FANTOM_DB:9830141G17"
/db_xref="taxon:10090"
                                                                                                                          clone="9830141G17"
'strain="C57BL/6J"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             note="putative"
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                                                                                                                                                                                   sex="male"
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CA367446 494 bp mRNA linear EST 06-NOV-2002 643337 NCCCWA 1RT Oncorhynchus mykiss cDNA clone 1RT109D02_D_B01 5', mRNA sequence.
CA367446
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               317 cercrecarcacedearrearreseaacagrereceararesarcrititrarar 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        TCTGACCAGCCTCCCCTTCCTGATTCACTACCAGTGGCGAAAACTGGATCTTTGG 305
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      557 gricricaciridearcacacacacacacacacacacacacararacarcaciriaagicaci 616
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       /dev stage="adult"
/lab_host="DH10B (phage-resistant)"
/clone lib="NICHD XGC_Sp1"
/note="Organ: spleen; Vector: pCMV-SPORT6; Site 1: NotI; Site 2: Sali; Cloned unidirectionally. Primer: Oligo dT. Average insert size 2.4 kb. Constructed by Life
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         486 GGTAGCTGTCATTCCGATGACCTTCTTGATCACAACAACAGGACCAACAGATCAGC
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      66 AAATTGCACTGATGAAAACATCCCACTCAAGATGCACTACCTCCCTGTTATTATGGCAT
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                                                                                                                                                                          CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Preparation: Life Technologies, Inc.
CDNA Library Arrayed by: The I.M.A.G.E. Consortium (LLNL)
DNA Sequencing by: Agencourt Bioscience Corporation
Clone distribution: MGC clone distribution information can }
found through the I.M.A.G.E. Consortium/LLNL at:
http://image.llnl.gov
Plate: LLAMI2152 row* column: 03
High quality sequence stop: 705.
High quality sequence stop: 705.
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EST.
Oncorhynchus mykiss (rainbow trout)
                              Bldg. 31 Rm10A07 Betheeda, MD 20892
Email: cgapbs-r@mail.nih.gov
Tissue Procurement: Dr. Igor Dawid
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       organism="Xenopus laevis"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    /mol_type="mRNA"
/db_xref="taxon:8355"
/clone="IMAGE:5507066"
National Cancer Institute / NIH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Technologies.
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NIH-MGC bttp://mgc.nci.nih.gov/.
National Institutes of Health, Mammalian Gene Collection (MGC)
Unpublished (1999)
Contact: Daniela S. Gerhard, Ph.D.
Office of Cancer Genomics
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Oncorbynchus mykiss
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Actinopterygii; Neopterygii; Teleostei; Euteleostei;
Protacanthopterygii; Salmoniformes; Salmonidae; Oncorhynchus.
I (bases I to 494)
Rexroad, C.E. 3rd, Lee, Y., Keele, J.W., Karamycheva, S., Brown, G.,
Koop, B., Gahr, S.A., Palti, Y. and Quackenbush, J.
Sequence analysis of a rainbow trout cDNA library and creation of
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Single pass sequencing. Bases called with phred v0.020425.c and
trimmed with the aid of the trim_alt option. Vector identified by
cross_match v0.990329.
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/note="Vector: pCMV SPORT6; Site 1: Not1; Site 2: Sal1;
Librat made from pooled tissue from brain, gill, liver,
spleen, muscle, and kidney."
                                                                                                                                                                                                                       Cytogenet. Genome Res. 102 (1-4), 347-354 (2003)
Contact: Rexroad CE
USDA, ARS, National Center for Cool and Cold Water Aquaculture
11876 Leetown Road, Kearneysville, WV 25430, USA
Tel: 304 725 0351
Fax: 304 725 0351
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     0; Gaps
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al Similarity 60.4%; Score 147.6; DB 6; Length 4
al Similarity 60.4%; Pred. No. 4.3e-31;
243; Conservative 0; Mismatches 159; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           427 TCCATTCACAAAACTCGATGTGCAGTTGTAGCCTGTGTG 468
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 organism="Oncorhynchus mykiss"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Seq primer: AGCGGATAACAATTTCACACAGGA Location/Qualifiers
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          /clone="1RT109D02_D_B01"
/tissue_type="pooled"
/lab_host="DH108"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         /mol_type="mRNA"
/db_xref="taxon:8022"
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1. .494
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        ORGANISM
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AUTHORS
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COMMENT
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GenCore version 5.1.6
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OM protein - protein search, using sw model

Run on:

October 29, 2004, 14:50:30 ; Search time 43 Seconds

(without alignments)
754.071 Million cell updates/sec

US-10-763-854-2

1 MNEPLDYLANASDFPDYAAA.....RCKVSGNLEQAKKISYSNNP 337 Title: Perfect score: Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283416 seqs, 96216763 residues Searched:

Total number of hits satisfying chosen parameters:

seq length: 0 seq length: 2000000000 Minimum DB Maximum DB

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database

PIR 79:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| | | de | | | SOMMERTES | |
|--------|-------|-------|--------------|-----|-----------|--------------------|
| Result | | Query | | | | |
| No. | Score | Match | Match Length | BB | ΩI | Description |
| 1 | 567 | ~ | 373 | (7) | | G protein-compled |
| 2 | 565.5 | ä | 362 | 7 | 833733 | |
| 3 | 562 | 31.7 | 373 | 7 | JC4162 | P2Y receptor - bov |
| 4 | 514 | 29.0 | 365 | 7 | 868679 | rotein-coupl |
| S | 479 | 27.0 | 373 | 7 | A47556 | ATP receptor P2u - |
| 9 | 438 | 24.7 | 375 | 7 | A54946 | P-2U nucleotide re |
| 7 | 4 | 3 | 328 | 0 | IS5450 | G protein-coupled |
| æ | 419.5 | 23.7 | 420 | 2 | 151667 | thrombin receptor |
| o, | 405 | 22.9 | 328 | 7 | JC4800 | P2Y6 receptor - hu |
| 10 | m | 22.4 | 427 | 7 | S17148 | H |
| 11 | In. | 22.4 | 432 | 7 | A43448 | thrombin receptor |
| 12 | 388.5 | 21.9 | 399 | 7 | 148705 | proteinase activat |
| 13 | m. | 21.9 | 425 | 7 | A37912 | ิดา |
| 14 | 38 | ä | 308 | ~ | I50241 | |
| 15 | 376.5 | ä | 361 | 7 | B45680 | G protein-coupled |
| 16 | 'n | - | 397 | 7 | S66518 | proteinase-activat |
| 17 | 370 | 20.9 | 355 | 7 | G02436 | chemokine (C-C) re |
| 18 | n | | 383 | 7 | S55594 | - 1 |
| 19 | LO. | ö | 352 | 7 | G00048 | fusin (LESTRA) - c |
| 20 | വ | 0 | 352 | N | A45747 | neuropeptide Y/pep |
| | ഹ | 6 | 362 | N | S68207 | G protein-coupled |
| | 35 | 19.9 | 362 | 7 | B57641 | G protein-coupled |
| 23 | 349.5 | 6 | 423 | 7 | JC7677 | allatostatin recep |
| | 4 | 6 | 356 | 7 | 842096 | interleukin-8 rece |
| 25 | 4 | 6 | 354 | 7 | 153033 | G protein-coupled |
| | 34 | 19.6 | 362 | 7 | A57641 | G protein-coupled |
| 27 | 347.5 | ٠. | 363 | ~ | A49092 | andiotensin II rec |
| 28 | 46. | 19.6 | 344 | 7 | T09508 | intron 17 puriners |
| 29 | 45. | 19.5 | 363 | 7 | 56 | angiotensin II rec |

| lymphocyte-specifi | G protein-coupled | heptahelical P2Y5- | andiotensin II rec | G protein-coupled | andiotensin II rec | neuropeptide Y/pep | interleukin-8 rece | andiotensin II rec | MIP-1 alpha recept | interleukin-8 rece | chemokine (C-C) re | G protein-coupled | G protein-coupled | G protein-compled | angiotensin II rec |
|--------------------|-------------------|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|-------------------|-------------------|--------------------|
| B55735 | JC2492 | JC5549 | JC2543 | G02064 | S15403 | S28787 | A53611 | JN0694 | I49340 | J01231 | A45177 | JC5067 | 169202 | A45680 | 139418 |
| 7 | 7 | 7 | 7 | 7 | 0 | 8 | 8 | 8 | N | 7 | ~ | 7 | 0 | N | 7 |
| 378 | 353 | 370 | 363 | 360 | 359 | 353 | 360 | 362 | 356 | 355 | 355 | 355 | 387 | 378 | 359 |
| 19.5 | 19.4 | 19.2 | 19.2 | 19.1 | 19.1 | 19.0 | 19.0 | 19.0 | 18.9 | 18.8 | 18.5 | 18.5 | 18.5 | 18.4 | 18.4 |
| 344.5 | 344 | 340 | 339.5 | 339 | 338.5 | 337 | 336.5 | 336 | 334 | 332.5 | 328 | 327 | 327 | 326.5 | 325.5 |
| | | | | | | | | | | | | | | | |

ALIGNMENTS

| KESULI 1 | |
|---|--|
| JC4737 | |
| G protein-coupled receptor P2Y1 - human | |
| N;Alternate names: P2Y1 purinergic receptor: P2Y1 purinoceptor | |
| C;Species: Homo sapiens (man) | |
| C;Date: 10-May-1996 #sequence revision 16-Aug-1996 #text change 09-Jul-2004 | |
| C;Accession: JC4737; JC4615; S54253 | |
| R; Janssens, R.; Communi, D.; Pirotton, S.; Samson, M.; Parmentier, M.; Boevnaems | |
| Biochem. Biophys. Res. Commun. 221, 588-593, 1996 | |
| A; Title: Cloning and tissue distribution of the human P2X1 recentor | |
| A; Reference number: JC4737; MUID: 96205320; PMID: 8630005 | |
| A;Accession: JC4737 | |
| A; Molecule type: DNA | |
| A; Residues: 1-373 <jan></jan> | |
| | |

Σ

A, Cross-references: UNIPROT: P47900; GB:S81950; NID:g1839438; PIDN:AAB47091.1; PID:g18394: R; Ayyanathan, K.; Webbs, T.B.; Sandhu, A.K.; Athwal, R.S.; Barnard, E.A.; Kunapuli, S.P. Biochem. Biophys. Res. Commun. 218, 783-788, 1996
A;Title: Cloning and chromosomal localization of the human P2Y1 purinoceptor. A;Reference number: JC4615; MUID:96158962; PMID:8579591

A; Molecule type: mRNA

A;Residues: 1-373 <AYY>
A;Residues: 1-373 <AYY>
A;Residues: 1-373 <AYY>
A;Cross-references: GB:U42029; NID:g1147730; PIDN:AAA97872.1; PID:g1147731
A;Experimental source: erythro leukemia cells
R;Leon, C; Vial, C; Cazenave, U; Gachet, C.
Bubmitted to the BMBL Data Library, May 1995
A;Description: Cloning of a human putative P2Y receptor.
A;Reference number: S54253

A;Accession: S54253

A;Status: preliminary Modecule type: mRNA A;Residuss: 1-137,139-373 <LEO> A;Cross-references: EMBL:Z49205; NID:g798835; PIDN:CAA89066.1; PID:g798836 C;Comment: This receptor belongs to a family of G protein-coupled receptors. It responds

C;Genetics:

A;Gene: p2Y1; GDB:P2RY1 A;Cross-references: GDB:677125; OMIM:601167 A;Map position: 3pter-3qter G;Superfamily: ATP receptor P2u

C;Keywords: G protein-coupled receptor; glycoprotein; phosphoprotein; transmembrane prote F;52-77/Domain: transmembrane #status predicted <TM1> F;88-111/Domain: transmembrane #status predicted <TM2>

F;124-152/Domain: transmembrane #status predicted <TM3>

Fil1-191/Domain: transmembrane #status predicted <TM5-Fi214-237/Domain: transmembrane #status predicted <TM5-Fi261-282/Domain: transmembrane #status predicted <TM6-Fi305-328/Domain: transmembrane #status predicted <TM6-Fi311-27,113,197/Binding site: carbohydrate (Asn) (covalent) #status predicted Fi258,336/Binding site: phosphate (Ser) (covalent) (by protein kinase A) #status predicte Fi330,339/Binding site: phosphate (Thr) (covalent) (by protein kinase C) #status predicte Fi330,339/Binding site: phosphate (Ser) (covalent) (by protein kinase C and calmodulin-depenc

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A;Residues: 1-373 <HEN>
A;Cross-references: UNIPROT:P48042; EMBL:X87628; NID:g1032484; PIDN:CAA60958.1; PID:g1032
A;Experimental source: aortic endothelial cell
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FEBS Lett. 384, 260-264, 1996
AyTitle: Molecular cloning and characterization of a novel orphan receptor (P(2P)) expre
A,Reference number: 568679; MUID:96197801; PMID:8617367
A,Accession: 568679
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C;Superfamily: ATP receptor P2u
C;Keywords: G protein-coupled receptor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 F;88-111/Domain: transmembrane #status predicted <PM3-
F;124-150/Domain: transmembrane #status predicted <PM3-
F;171-191/Domain: transmembrane #status predicted <PM4-
F;214-237/Domain: transmembrane #status predicted <PM6-
F;261-282/Domain: transmembrane #status predicted <PM6-
F;361-282/Domain: transmembrane #status predicted <PM6-
F;361-282/Domain: transmembrane #status predicted <PM6-
F;11.27,113,197/Binding site: carbohydrate (Asn) (covalent) #status predicted
F;258/Binding site: phosphate (Ser) (covalent) (by protein kinase A) #status p
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   42 CALTKTGFQFYYLDAVYILVFIIGFLGNSVAIWMFVFHMKFWSGISVYMFNLALADFLYV 101
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        84 TSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSSILFLTCFSIFRYCVIIHPMSCFS 143
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     144 IHKTRCAVVACAVVWIISLVAVIPMTFLITSTNRTNRS-ACLDLTSSDELNTIKWYNLIL 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                162 RIKKKKNAVYISVLVWLIVVVGISPILFYSGTGIRKNKTITCYDTTSDEYLRSYFIYSMCT 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 TATTFCLPLVIVILCYTTIIHTLTHGLQTDSCLKQKARRLTILLLLLAFYVCFLPFHILRV 262
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C;Date: 15-Feb-1997 #sequence_revision 13-Mar-1997 #text_change 09-Jul-2004
                                                           C;Species: Bos primigenius taurus (cattle)
C;Date: 12-Oct-1995 #sequence_revision 10-Nov-1995 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              24 CTDENIPLKMHYLPVIYGIIFLVGFPGNAVVISTYIFKMRPWKSSTIIMLNLACTDLLYL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            263 IRIESRL---LSISCSIENQIHEAYIVSRPLAALNTFGNLLLYVVVSDNFQQAVCSTVR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            transmembrane protein
                                                                                                                       C;Accession: JC4162
R;Henderson, D.J.; Elliot, D.G.; Smith, G.M.; Webb, T.B.; Dainty, I.A. Biochem. Biophys. Res. Commun. 212, 648-656, 1995
A;Title: Cloning and characterisation of a bovine P2Y receptor. A;Reference number: JC4162; MUID:95352058; PMID:7626079
A;Accession: JC4162
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 365;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            C;Keywords: glycoprotein; phosphoprotein; receptor; t1
F;52-77/Domain: transmembrane #status predicted <TMl>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31.7%; Score 562; DB 2; 36.1%; Pred. No. 1.8e-40;
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C,Superfamily: ATP receptor P2u
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                                                                                                                                                                                                                                                                                                                                                            A; Molecule type: mRNA
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hes 108;
                                         P2Y receptor -
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Grotein-coupled receptor - chicken
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C;Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 09-Jul-2004
C;Accession: S33733
A;Ttle: Cloning and functional expression of a brain G-protein-coupled ATP receptor.
A;Reference number: S33733
A;Accession: S33733
A;Accession: S33733
A;Accession: S33733
A;Residues: 1-362 <WEB-A;Accession: C;AWED-A;Accession: C;AW
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                54 VISTYIFKWRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFWCKFIRFSF 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               HENLYSSILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVACAVVWIISLVAVIPMTFLI- 172
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                                                                                                                                                                                                                                                                                                                                  144 IHKTRCAVVACAVVWIISLVAVIPMTFLITSTNRTNRS-ACLDLTSSDELNTIKWYNLIL 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TATTFCLPLVIVILCYTTIIHTLTHGLQTDSCLKQKARRLTILLLLLAFYVCFLPFHILRV 262
                                                                                                                                                                                   | ::|| || || || CALTKTGFQFYYLPAVYILVFIGFLGNSVAIMMFVFHMKPWSGISVYMFNLALADFLYV 101
                                                                                                                                                                                                                                                                                            84 TSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSSILFLTCFSIFRYCVIIHPMSCFS 143
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                                                                                                                                              CTDENIPLKWHYLPVIYGIIFLVGFPGNAVVISTYIFKMRPWKSSTIIMLNLACTDLLYL 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MNEPLDYLANASDFPDYAA -- - AFGN -- -- CTDENIPLKMHYLPVIYGIIFLVGFPGNAV
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                                                                       Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                263 IRIESRL---LSISCSIENQIHEAYIVSRPLAALNTFGNLLLYVVVSDNFQQAVCSTVR
                                                                              4
       DB 2; Length 373;
                                                                       68; Mismatches 119; Indels
       32.0%; Score 567; DB 2; 36.1%; Pred. No. 6.6e-41;
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                                         36.1%;
                                                                          108; Conservative
Query Match
Best Local Similarity
Matches 108; Conserv
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A;Cross-references: UNIPROT:063371; GB:D63665; NID:g1066007; PIDN:BAA09816.1; PID:g106600
C;Superfamily: ATP receptor P2u
C;Keywords: G protein-coupled receptor
      Proc. Natl. Acad. Sci. U.S.A. 91, 3275-3279, 1994
Affitle: Cloning and expression of a human P-2U nucleotide receptor, a target for cystic A;Reference number: A54946; MUID:94211846; PMID:8159738
A;Accession: A54946
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Grotein-coupled P2 receptor - rat
C; Species: Rattus norvegicus (Norway rat)
C; Species: Rattus norvegicus (Norway rat)
C; Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 09-Jul-2004
C; Accession: 155450
B; Chang, K.; Hanaoka, K.; Kumada, M.; Takuwa, Y.
J. Biol. Chem. 270, 26152-26158, 1995
A; Title: Molecular cloning and functional analysis of a novel P2 nucleotide receptor.
A; Reference number: 155450; MUID:96064682; PMID:7592819
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          208 CLPLVIVTLCYTTIIHTL-----THGLQTDSCLKQKARRLTILLLLAFYVCFLPFHIL 260
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  96 GENWIFGDFMCKFIRFSFHFNLYSSILFLTCFSIFRYCVIIHPMSCFSIHK---TRCAVV 152
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  153 ACAVVWIISLVAVIPMTFLITSTNRTNRSACLDLTSSDELNTIKWYNLILTATTFCLPLV 212
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                   28 NEDFKYVLLPVSYGVVCVLGLCLNAVGLYIFLCRLKTWNASTTYMFHLAVSDALYAASLP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          148 RCAVVACAVVWIISLVAVIPMTFLITSTNRTNRSACLDLTSSDELNTIKWYNLILTATTF
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                                                                                                                                                                                                                                                                                                                                                   Ouery Match 24.7%; Score 438; DB 2; Length 375;
Best Local Similarity 33.0%; Pred. No. 6.7e-30;
Matches 93; Conservative 59; Mismatches 118; Indels 12; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          36 LPVIYGIIFLVGFPGNAVVISTYIFKMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYAS
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                                                                                                                                                                                were confirmed by protein sequencing
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                                                                                                                                                                                                                                          A;Cross-references: GDB:362713; OMIM:600041
A;Map position: 11q13.5-11q14.1
C;Superfamily: ATP receptor P2u
C;Keywords: G protein-coupled receptor; transmembrane protein
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A;Status: preliminary; translated from GB/EMBL/DDBJ
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A;Note: parts of this sequence
                                                                                           A;Status: preliminary
A;Molecule type: mRNA; protein
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                                                                                                                                      A;Residues: 1-375 <PAR>
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C.Superfamily: ATP receptor P2u
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P-2U nucleotide receptor - human
C;Species: Homo sapiens (man)
C;Date: 11-Nov-1994 #sequence_revision 11-Nov-1994 #text_change 17-Mar-1999
C;Accession: A54946
R;Parr, C.E.; Sullivan, D.M.; Paradiso, A.M.; Lazarowski, E.R.; Burch, L.H.; Olsen, J.C.
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                                                                                                                        86 LPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSSILFLTCFSIFRYCVIIHPMSCFSIH 145
                                                                                                                                                                                                                                                                                                                               ATP receptor P2u - mouse
C;Species: Mus musculus (house mouse)
C;Accession: A47556
R;Lustig, K.D.; Shiau, A.K.; Brake, A.J.; Julius, D.
Proc. Natl. Acad. Sci. U.S.A. 90, 5113-5117, 1993
A;Title: Expression cloning of an ATP receptor from mouse neuroblastoma cells.
A;Reference number: A47556; MUID:93281707; PMID:7685114
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                                                                                                                                                                                                               146 KTRCAVVACAVVWIISLVAVIPMTFLITSTNRTNRSACLDLTSSDELNTIKWYNLILTAT
                                                                                                                                                                                                                                                                                                  206 TFCLPLVIVTLCYTTIIHTLTHGL--QTDSCLKQKARRLTILLLLAFYVCFLPFHILRVI
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      4; Gaps
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64; Mismatches 119; Indels
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101; Conservative
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A;Molecule type: mRNA
A;Residues: 1-373 <LUS>
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alpha-thrombin receptor - Chinese hamster
C;Species: Cricetulus griseus (Chinese hamster)
C;Species: Cricetulus griseus (Chinese hamster)
C;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 09-Jul-2004
C;Accession: S17148
Fyrasmussen, U.B.; Vouret-Craviari, V.; Jallat, S.; Schlesinger, Y.; Pages, G.; Pavirani, FbBS Lett. 288, 123-128, 1991
A;Title: cDNA cloning and expression of a hamster alpha-thrombin receptor coupled to Ca(? A;Reference number: S17148; MUID:91348247; PMID:1652467
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A;Cross-references: UNIPROT:000991; EMBL:X61958; NID:9940495; PIDN:CAA43957.1; PID:949538
C;Keywords: G protein-coupled receptor; transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              114 HFNLYSSILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVACAVVWIISLVAVIPMTFLIT 173
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                143 AAWLVCVAVWLAVITQCLPTAIFAATGIQRNRIVCYDLSPPALATHYMPYGMALTVIGFL 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     92 YYASGENWIFGDFMCKFIRFSFHFNLYSSILFLTCFSIFRYCVIIHPMSCFSIHK---TR 148
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CAVVACAVVWIISLVAVIPMTFLITSTNRTNRSACLDLTSSDELNTIKWYNLILTATTFC 208
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  209 LPLVIVILCYTTIIHTLTHGLQTDSCLKQ----KARRLTILLLLAFYVCFLPFHILRVIR 264
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ----YLPVIYGIIFLVGFPGNAV 53
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 32 KMHYLPVIYGIIFLVGFPGNAVVISTYIFKMRPWKSSTIIMLNLACTDLLYLTSLPFLIH 91
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       25 KQLLLPPVYSAVLAAGLPLNICVITQICTSRRALTRTAVYTLNLALADLLYACSLPLIIY 84
           A;Cross-references: EMBL:U52464; NID:g1407632; PIDN:AAB03572.1; PID:g1407633
C;Genetics:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             54 VISTYIFKMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                           44; Mismatches 140; Indels 10; Gaps
                                                                                                  C;Superfamily: ATP receptor P2u
C;Keywords: glycoprotein; placenta; receptor; transmembrane protein
C;Keywords: glycoprotein; placenta; receptor; transmembrane protein
F;26-52/Domain: transmembrane #status predicted <TWM1>
F;63-86/Domain: transmembrane #status predicted <TWM2>
F;104-122/Domain: transmembrane #status predicted <TWM4>
F;133-126/Domain: transmembrane #status predicted <TWM5>
F;241-264/Domain: transmembrane #status predicted <TWM5>
F;283-305/Domain: transmembrane #status predicted <TWM7>
F;5,113/Binding site: carbohydrate (Asn) (covalent) #status predicted
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       265 IESRLL-SISCSIENQIHEAYIVSRPLAALNTFGNLLLYVVVSDNFQQ 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                22.4%; Score 397; DB 2; Length 427; 28.4%; Pred. No. 2.4e-26; ive 75; Mismatches 141; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                        22.9%; Score 405; DB 2; 32.6%; Pred. No. 3.8e-27;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     10 NASDFPDYAAAFGNCTDENIPLKMH-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  95; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Best Local Similarity 32.69
Matches 94, Conservative
A; Residues: 'M', 4-328 < HAM>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A;Residues: 1-427 <RAS>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A;Status: preliminary
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        A; Accession: S17148
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C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Species: Homo sapiens (man)
C;Species: Homo sapiens
C;Date: 15-Oct-1995 #sequence_revision 16-Aug-1996 #text_change 09-Jul-2004
C;Accession: JG4800; G02514
R;Communi, D.; Parmentier, M.; Boeynaems, J.M.
Biochem. Biophys. Res. Commun. 222, 303-308, 1996
A;Title: Cloning, functional expression and tissue distribution of the human P2Y6 recept
A;Reference number: JG4800; MUID:96222498; PMID:8670200
A;Recidues: JG4800
A;Residues: J-328 «COM»
A;Residues: J-328 «COM»
A;Residues: J-328 «COM»
A;Residues: UNIPROT:Q15077; EMBL:X97058
A;Experimental source: placenta
A;Experimental source: placenta
A;Experimental source: placenta
A;Experimental source: placenta
A;Experimental source: placenta
A;Experimental source: placenta
A;Experimental source: placenta
A;Experimental source: placenta
A;Remmet, F.; Southey, M.C.; Somers, G.R.; Hutchins, A.M.; Venter, D.J.
A;Reference number: H01373
                                                                                                                                                                                                                                                                                                                                                                     thrombin receptor - African clawed frog
C;Species: Xenopus laevis (African clawed frog)
C;Species: Xenopus laevis (African clawed frog)
C;Species: Xenopus laevis (African clawed frog)
C;Date: 13-Sep-1996 #sequence_revision 13-Sep-1996 #text_change 09-Jul-2004
C;Accession: 151667
R;Gerszten, R.E.; Chen, J.; Ishii, M.; Ishii, K.; Nanevicz, T.; Turck, C.W.; Vu, T.H.; C
A;Reference number: 19967; MUD:94195429; PMID:8145852
A;Reference number: 151667; MUD:94195429; PMID:8145852
A;Accession: 151667
A;Accession: 151667
A;Anolecule type: mRNA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: UNIPROT:P47749; EMBL:U09632; NID:g495197; PIDN:AAA18498.1; PID:g4954
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                223 SFIWLISIASTIPLLV----TEQTQKIPRLDITTCHDVLDLKDLKDFY--IYYFSSFCLL 276
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            210 ----PLVIVTLCYTTIIHTLTHGLQTDSCLKQKARRLTILLLLAFYVCFLPFHILRVIRI 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            277 FFFVPFITTTCYIGIIRSLSSSSIENSCKKTRALFLAVVVLCVFIICFGPTNVL---- 331
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SGENWIFGDFWCKFIRFSFHFNLYSSILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVAC 154
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             155 AVVWIISLVAVIPMTFLITSTNRTNRSACLDLTSSDELNTIK----WYNLILTATTFCL- 209
                                                                                               --LKOKARRLTILLLAFYVCFLPFHIL 260
  147 VCGVVWLVVTAQCLPTAVFAATGIQRNRTVCYDLSPPILSTRYLPYGWALTVIGFLLPFT 206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       266 ESRLLSISCSIENQ-IHEAYIVSRPLAALNTFGNLLLYVVVSDNFQQAVCSTVRC-KVS 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           35 YLPVIYGIIFLVGFPGNAVVISTYIFKMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYA
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                                                                                                                                                                                                             261 RVIRIESRLL-SISCSIENQIHEAYIVSRPLAALNTFGNLLLYVVVSDNFQQ 311
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A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
                                                                 213 IVTLCYTTIIHTLTHGLQTDSC-
                                                                                                                          207 ALLACYCRMARRL---
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251

94

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311

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A;Cross-references: UNIPROT:P55086; EMBL:Z48043; NID:g663020; PIDN:CAA88097.1; PID:g66302
C;Superfamily: ATP receptor P2u
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A;Title: Molecular cloning of a functional thrombin receptor reveals a novel proteolytic A;Reference number: A37912; MUID:91168254; PMID:1672265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A, Residues: 1-425 < VUA>
A, Cross-references: UNIPROT: P25116; GB: M62424; NID: G339676; PIDN: AAA36743.1; PID: G339677
                                                                                                                                                                                                                                                                 95 SGENWIFGDFMCKFIRFSFHFNLYSSILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVAC 154
                                                                                                                                                                                                                                                                                                                                                          155 AV---VWIISLVAVIPM-----TFLITSTNRTNRSACLDLTSSDEL-NTIKWYNLILTAT 205
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           264 RIESRLLSISCSIENQIHEAYIVSRPLAALNTFGNLLLYVVVSDNFQQ-----AVCSTVR 318
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ----HYFLIKTQRQSHVYALYLVALCLSTINSCIDPFVYYFVSKDFRDHARNALLCRSVR 367
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SGENWIFGDFMCKFIRFSFHFNLYSSILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVAC 154
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         209 LPLVIVILCYTTIIHTLTHGLQTDSCLKQKARRLTILLLLAFYVCFLPFHILRVIRIESR 268
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            35 YLPVIYGIIFLVGFPGNAVVISTYIFKMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYA 94
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C.Keywords: G protein-coupled receptor; glycoprotein; transmembrane protein F;1-26/Domain: signal sequence #status predicted <SIG>F;27-425/Product: thrombin receptor #status predicted <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      C;Species: Homo sapiens (man)
C;Date: 22-Jan-1993 #sequence_revision 22-Jan-1993 #text_change 09-Jul-2004
C;Accession: A37912
                                                                                                                                                                                                                                35 YLPVIYGIIFLVGFPGNAVVISTYIFKMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          195 GVSLAIWLLIFLVTIPLYVMKQTIYIPALNIT---TCHDVLPEEVLVGDMFNYFLSLAIG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             206 TFCLPLVIVTLCYTTIIHTLTHGLQTDSCLK--QKARRLTILLLLLAFYVCFLPFHILRVI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 252 VFLFPALLTASAYVLMIKTLKSSAMDEHSEKKRQRAIRLIITVLAMYFICFAPSNLLLLVV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    224 LAIWALAIAGVVPLVLKEQTIQVPGLNIT---TCHDVLNETLLEGYYAYYFSAFSAVFFF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21; Gaps
                                                                                                                                                                                    33;
                                                                                                                                         Length 399;
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                                                                                                                               ; Score 388.5; DB 2;
; Pred. No. 1.2e-25;
65; Mismatches 129;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match 21.9%; Score 388.5; DB 2; Best Local Similarity 29.3%; Pred. No. 1.3e-25; Matches 93; Conservative 70; Mismatches 133;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Cross-references: GDB:127737; OMIM:187930
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          368 TVNRMQISLSSNKFSRKSGSYSSS 391
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               thrombin receptor precursor - human
                                                                                                                                 21.9%;
                                                                                                                                                                                  97; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Map position: 5q13-5q13
       A; Molecule type: mRNA
A; Residues: 1-399 <RES>
                                                                                                                                                        Best Local Similarity
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                                                                                                                                    Query Match
                                                                                                                                                                               Matches
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                                                                                                                                                                                                                                                                                                                                                               thrombin receptor - rat
C;Species: Rattus norvegicus (Norway rat)
C;Date: 04-Mar-1993 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004
C;Accession: A41448
R;Zhong, C.; Hayzer, D.J.; Corson, M.A.; Runge, M.S.
J. Biol. Chem. 267, 16975-16979, 1992
A;Title: Molecular cloning of the rat vascular smooth muscle thrombin receptor. Evidence A;Reference number: A43448; MUID:92381002; PMID:1324917
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A;Cross-references: UNIPROT:P26824; GB:M81642; NID:9207465; PIDN:AAA42274.1; PID:9207466
A;Experimental source: RASM aortic smooth muscle cells
A;Note: sequence extracted from NCBI backbone (NCBIN:111973; NCBIP:111974)
C;Keywords: G protein-coupled receptor; transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C; Accession: I48705
R; Nystedt, S.; Larsson, A.K.; Aberg, H.; Sundelin, J.
Biol. Chem. 270, 5550-5955, 1995
A; Title: The mouse proteinase-activated receptor-2 cDNA and gene. Molecular cloning and A; Reference number: I48705; MUID: 95197620; PMID: 7890726
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               8
                                                                                                                            174 STNRT----NRSACLDLTSSDELNTI-KWYNLILTATTFCLPLVIVTLCYTTIHTLTHGL 229
                                                244 QTTRVPGLNITTCHDVLNETLLQGFYSYYFSAVFFLVPLIISTICYMSIIRCLSSSS 303
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      VVISTYIFKMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFS 112
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  113 FHFNLYSSILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVACAVVWIISLVAVIPMTF-- 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                249 QTTQVPGLNITTCHDVLNETLLHGFYSYYFSAFSAIFFLVPLIISTVCYTSIIRCLSSSA 308
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  171 LITSTNRTNRSACLDLTSSDELNTI-KWYNLILTATTFCLPLVIVTLCYTTIIHTLTHGL 229
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   230 QTDSCLKQKARRLTILLLLAFYVCFLPFHILRVIRIESRLLSISCSIENQIHEAYIVSRP 289
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VANRSKKSRALFLSAAVFCIFIVČFGPTNVLLIVHY--LLLSDSPGTET-AYFAYLLCVC 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ----AFGNCTDENIPLXMHYLPVIYGIIFLVGFPGNA 52
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C;Date: 02-Jul-1996 #sequence_revision 02-Jul-1996 #text_change 09-Jul-2004
                                                                                                230 QTDSCLKQKARRLTILLLLAFYVCFLPFHILRVIRIESRLLSISCSIENQIHEAYIVSRP
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29.6%; Pred. No. 2.7e-26;
ive 74; Mismatches 141; Indels
                                                                                                                                                                                                                             361 VSSVSCCIDPLIYYYASSECQRTLYGILCCKESSD 395
                                                                                                                                                                                               290 LAALNTFGNLLLYVVVSDNFQQAVCSTVRCKVSGN 324
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             290 LAALNTFGNLLLYVVVSDNFQQAVCSTVRCKVSGN 324
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A;Status: preliminary; translated from GB/EMBL/DDBJ
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Best Local &
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Search completed: October 29, 2004, 15:05:21
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A;Title: Identification of 6H1 as a P2Y purinoceptor: P2Y5.
A;Reference number: JC4618; MUID:96190677; PMID:8619790
A;Accession: JC4618
                                                                                                                                                                                                                                                                                                    RESULT 14
150241
G protein-coupled receptor 6H1 - chicken
NALternate names: purinoceptor 6H1
C;Species: Gallus gallus (chicken)
C;Species: Gallus gallus (chicken)
C;Species: Gallus gallus (chicken)
C;Accession: 15.941; JC4618
R;Kaplan, M.H.; Smith, D.I.; Sundick, R.S.
J. Immunol. 151, 628-636, 1993
A;Title: Identification of a G protein coupled receptor induced in activated T cells.
A;Reference number: I50241; MUID:9329058; PMID:8393036
A;Accession: 150241
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339 FLSHTSTTE-AAYFAYLLCVCVSSISSCIDPLIYYYASSECQRYVYSILCCKESSDPSSY 397
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         23 NCTDENIPLKMHYLPVIYGIIFLVGFPGNAVVISTYIFKMRPWKSSTIIMLNLACTDLLY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     A;Residues: 1-308 <WEB>
A;Cross-references: GB:L06109; NID:g304383; PIDN:AAB06587.1; PID:g304384
A;Cross-references: GB:L06109; NID:g304383; PIDN:AAB06587.1; PID:g304384
C;Comment: This receptor plays a role in T-cell activation.
C;Genetics:
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                                                                             LLSISCSIENQIHEAYIVSRPLAALNTFGNLLLYVVVSDNFQQAVCSTVRCK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; DB 2; Length 308; 4.9e-25;
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C.Keywords: G protein-coupled receptor; transmembrane protein
C.Keywords: G protein-coupled receptor; transmembrane protein
F.51-74/Domain: transmembrane #status predicted <TM2>
F.89-109/Domain: transmembrane #status predicted <TM2>
F.133-153/Domain: transmembrane #status predicted <TM4>
F.137-201/Domain: transmembrane #status predicted <TM5>
F.227-248/Domain: transmembrane #status predicted <TM5>
F.227-248/Domain: transmembrane #status predicted <TM5>
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A,Molecule type: mRNA
A,Residues: 1-308 <KAP>
                                                                                                                                                                                       -VSGNLEQAKKISYSNN 336
                                                                                                                                                                                                                                    398 NSŚGOLMASKMDTCŚSN 414
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                                                                                  269
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C,Accession: E45680
R;Birkenbach, M.; Uosefsen, K.; Yalamanchili, R.; Lenoir, G.; Kieff, E.
Wirol. 67, 2209-2220, 1993
A;Title: Epstein-Barr virus-induced genes: first lymphocyte-specific G protein-coupled pe A;Reference number: A45680; MUID:93188173; PMID:8383238
                                                                                                                                                                                                                                                                                                        A;Status: preliminary
A;Molecule type: nucleic acid
A;Residues: 1-361 cBIR.
A;Cross-references: UNIPROT:P32249; GB:L08177; NID:g292056; PIDN:AAA35924.1; PID:g292057
A;Experimental source: B-lymphocytes
A;Note: sequence extracted from NCBI backbone (NCBIN:127096, NCBIP:127097)
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        239 ARRLTILLLLAFYVCFLPFHILRVIRIESRLLSISCSIE-NOIHEAYIVSRPLAALNTFG 297
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 242 ALNTILLIIVVFVLCFTPYHV-AIIQHMIKKLRFSNFLECSQRHSFQISLHFTVCLMNFN 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   11 ASDF.PDYAAAFGNCTDENIPLKMHY-----LPVIYGIIFLVGFPGNAVVISTYIFKMR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   6 ANNFIPPSATPQGNDCD----LYAHHSTARIVMPLHYSLVFIIGLVGNLLALVVIVQNRR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  64 PWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFWCKFIRFSFHFNLYSSILF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           122 MİCLSİDRFIAVVHPLRYNKİKRIEHAKGVCIFVMİLVFAQTLPLLINPMSKQEAERITC
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 184 LDLTSSDELNTIKWYNLILTATTFCLPLVIVTLCYTTIIHTL----THGLQTDSCLKQK
                                        C;Species: Homo sapiens (man)
C;Date: 21-Sep-1993 #sequence_revision 18-Nov-1994 #text_change 09-Jul-2004
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   21.3%; Score 376.5; DB 2; Length 26.9%; Pred. No. 1.1e-24; tive 70; Mismatches 159; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     C;Superfamily: ATP receptor P2u
C;Keywords: G protein-coupled receptor; transmembrane protein
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            : : | : : | : : | 301 CCMDPFIYFFACKGYKRKVMRMLKRQVSVSISSAVKSAPEEN 342
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    298 ---NLLLYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNN 336
protein-coupled peptide receptor EBI 2 - human
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Query Match
Best Local Similarity 26.9%
Matches 92; Conservative
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
```

OM protein - protein search, using sw model

October 29, 2004, 14:16:02; Search time 192 Seconds (without alignments) 1009:902 Million cell updates/sec Run on:

Title: Perfect score:

US-10-763-854-2 1771 1 MNEPLDYLANASDFPDYAAA.....RCKVSGNLEQAKKISYSNNP 337 Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

1825181 seqs, 575374646 residues Searched:

1825181 Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

UniProt_02:*
1: uniprot_sprot:*
2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| | Description | reines omod Sando | , aim | | | 36 rattu | ufusum sum Stmd80 | | P59902 cavia porce | mus mu | Н | Bac29506 mus muscu | | | meleagi | Н | · N | 7 | xenopiis | 7 xenopus | 6 meleagri | | | | P51582 homo gapien | 035811 rattus norv | | 1 = | | rattins | 90 rattu |
|-----|----------------|-------------------|--------|----------|--------|----------|-------------------|--------|--------------------|------------|----------|--------------------|------------|------------|------------|----------|------------|--------|------------|-----------|------------|--------|--------|----------|--------------------|--------------------|------------|----------|------------|---------|----------|
| | ID | GP80 HIMAN | OGIYE8 | AAT10591 | O6Y1R5 | AAP32736 | OBBMJS | Q9DE05 | P2YR CAVPO | P2YR MOUSE | BAC28413 | BAC29506 | P2YR HUMAN | P2YR CHICK | P2YR MELGA | P2YR RAT | P2YR BOVIN | Q7ZWQ7 | P2Y8 XENLA | Q90X57 | 057466 | Q7ZZA4 | Q6P852 | AAH61378 | P2Y4 HUMAN | P2Y4 RAT | P2Y4 MOUSE | BAC36314 | P2Y3 CHICK | Q6IYF9 | AAT10590 |
| | DB | - | N | 7 | 7 | ~ | 7 | 7 | Н | ٦ | N | N | Н | 7 | Н | Н | П | 7 | 7 | 7 | ~ | ۲, | 7 | 7 | - | Н | 7 | 7 | н | 7 | N |
| | Length | 337 | 337 | 337 | 337 | 337 | 373 | 357 | 373 | 373 | 373 | 373 | 373 | 362 | 362 | 373 | 373 | 537 | 537 | 361 | 374 | 347 | 349 | 349 | 365 | 361 | 361 | 361 | 328 | 317 | 317 |
| офо | Query Match | 100.0 | 84.4 | 84.4 | 84.0 | 84.0 | 32.7 | • | 32.5 | | | ς. | | | 31.9 | | 31.7 | | 31.5 | ٠. | 30.9 | | | 30.1 | | 28.9 | 28.4 | 28.4 | | 27.6 | 27.6 |
| | Score | 1771 | 1495 | 1495 | 1487 | 1487 | 579 | 577.5 | 576 | 575 | 575 | 575 | 267 | 565.5 | 565.5 | 565 | 562 | 559 | 557 | 556.5 | 547 | | | 532.5 | 514 | 512 | 503 | 503 | 492 | | 488.5 |
| | Result No. | H | 7 | е | 4 | S | 9 | 7 | 80 | o | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 22 | 56 | 27 | 28 | 29 | 30 |

| Aah69160 homo sapi | 093361 meleagris g | P41232 rattus norv | Aah61754 rattus no | O9bxa5 homo sapien | P35383 mus musculu | P41231 homo sapien | 095n03 sus scrofa | OBr528 mus musculu | O920al mus musculu | 0924t9 rattus norv | 063371 rattus norv | Aah72520 rattus no | Q9erk9 mus musculu |
|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| AAH69160 | P2Y3_MELGA | P2Y2 RAT | AAH61754 | GP91 HUMAN | P2Y2 MOUSE | P2Y2 HUMAN | CLT2_PIG | 08R5 <u>2</u> 8 | CLT2 MOUSE | CLT2_RAT | P2Y6_RAT | AAH72520 | P2Y6_MOUSE |
| 7 | н | Н | N | Н | Ч | н | Н | ~ | | H | н | ~ | -1 |
| 346 | 328 | 374 | 374 | 330 | 373 | 377 | 345 | 309 | 309 | 309 | 328 | 328 | 328 |
| 27.5 | 27.5 | 27.3 | 27.3 | 27.0 | 27.0 | 26.8 | 25.5 | 25.2 | 25.0 | 24.3 | 23.9 | 23.9 | 23.8 |
| 487.5 | 486.5 | 483.5 | 483.5 | 479 | 479 | 474 | 452 | 445.5 | 442.5 | 430 | 423 | 423 | 421 |
| 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |

ALIGNMENTS

| STANDAR FL1; | 10-OCT-2003 (Rel. 42, 10-OCT-2003 (Rel. 42, 05-JUL-2004 (Rel. 44, Probable G protein-cou | | 3211-00- | 31. H 2 3 - 0 2 | 0 A C - 0 M - | -00 00 H = 100 F | 5,6,4,5 | DD DD DD DD DD DD DD DD DD DD DD DD DD | HUMAN STANDARD; PRT; B; OBSTL1; T-2003 (Rel. 42, Last sequence L-2004 (Rel. 44, Last sequence L-2004 (Rel. 44, Last sequence L-2004 (Rel. 44, Last sequence L-2004 (Rel. 44, Last annotation) GPR80; Synonyms=GPR9; GPR80; Synonyms=GPR9; GPR80; Synonyms=GPR99; Sapiens (Human) Ila; Eutheria; Primates; Catari TaxID=9606; NK., Nguyen T., Lynch K.R., Chr T., Evans J.F., George S.R., Covery and mapping of ten novel T., Evans J.F., George S.R., Covery and mapping of ten novel T., Evans J.F., Hellebrand S., Muncler RROM N.A. B=12098350; Derger T., Hellebrand S., Muncler H.C., Hampe W.; J, a new G protein-coupled receptories L-12098350; Dectide receptors."; Section N.A. WEE FROM N.A. B=Placenta; J-17(2002). WEE FROM N.A. WEE 2040266; PubMed=12044878; A. Sato T., Okouchi I., Arita A., Sato T., Okouchi I., Arita |
|-----------------|---|--|----------|-----------------|---------------|------------------|---------|--|--|
|-----------------|---|--|----------|-----------------|---------------|------------------|---------|--|--|

us-10-763-854-2.rup

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Pfam; PF00001; 7tm 1; 1.
PRINTS; PR00237; GPCRRHODOPSN.
PRINTS; PR01157; P2YPURNOCPTR.
                                                                                                                                                                                                                 G-protein-coupled receptor 99.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
Best Local Similarity 85.5%
Matches 288; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRELIMINARY;
                                                                                                                                                                                                                                                Mus musculus (Mouse)
                                                                                                                                                                                                                                                                                                                                                                                                           Nature 0:0-0(2004).
                                                                                                                                                                                                                                                                                                                       SEQUENCE FROM N.A.
                                                                                                                                                                                                                                   Name=Gpr99;
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AAT10591;
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SEQUENCE
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                                                                                    This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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TISSUE SPECIFICITY: Detected in kidney and, to a lower extend, in placenta. Not detected in brain tissues including the frontal cortex, caudate putamen, thalamus, hypothalamus, hippocampus or
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Gaps
                                                           SIMILARITY: Belongs to family 1 of G-protein coupled receptors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  N-linked (GLCNAc. .) (Potential).
N-linked (GLCNAc. .) (Potential).
N-linked (GLONAc. .) (Potential).
N-linked (GLONAc. .) (Potential).
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InterPro; IPR002266; P2_purnocptor.
PFam; PF00001; 7tm 1; 1.
PRINTS; PR00237; GPCRHODOPSN.
PROSITE; PS600237; GPROTEIN RECEP_F1_1; FALSE_NEG.
PROSITE; PS50262; G_PROTEIN_RECEP_F1_2; 1.
G_protein coupled receptor; Glycoprotein; Transmembrane.
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7 (Potential)
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-> R (in Ref. 5).
6814EA0044756CE6 CRC64;
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Extracellular (Potential)
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Cytoplasmic (Potential).
4 (Potential).
Extracellular (Potential)
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Cytoplasmic (Potential).
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Cytoplasmic (Potential).
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; Pred. No. 3.3e-112;
0; Mismatches 0;
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EMBL; AF8770886; AAM76512.1; -.
EMBL; AB083598; BAB89311.1; -.
EMBL; AB065877; BAC06095.1; -.
EMBL; AJ305372; CAC83857.1; -.
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Matches 337; Conservative
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337 AA;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   STRAIN=BALB/C;
He W., Miao F.J.P., Lin D.C.H., Schwandner R.T., Wang Z., Gao J.,
Chen J.-L., Tian H., Ling L.;
"Citric Acid Cycle Intermediates as Ligands for Orphan G-Protein-
Coupled Receptors.";
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05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
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                                                                                         301 LYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP 337
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85.5%; Pred. No. 1.6e-93;
iive 13; Mismatches 36;
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GO, GO:004872; F:receptor activity; IEA.
InterPro; IPR00276; GPCR Rhodpsn.
InterPro; IPR002286; P2_purnocptor.
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InterPro, IPR000276; GPCR_Rhodpsn.
InterPro, IPR002286; P2_purnocptor.
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                              Pfam, PF00001; 7tm 1, 1.
PRINTS, PR00237; GPCRRHODOPSN.
PRINTS; PR01157; P2YPURNOCPTR.
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EMBL; AY191367; AAP32736.1;
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PubMed=15001573;
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Best Local Similarity
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                                                                                   Receptor.
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AAP32736;
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
NCBI_TaxID=10116;
                                                              Mus musculus (Mouse).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
                                                                                                                                                    He W., Miao F.J.P., Lin D.C.H., Schwandner R.T., Wang Z., Gao J., Chen J.-L., Tian H., Ling L., "Citric Acid Cycle Intermediates as Ligands for Orphan G-Protein-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Inbe H., Watanabe S., Miyawaki M., Tanabe E., Encinas J.A., "Identification and Characterization of a Cell-Surface Receptor,
                                                                                                                                                                                                                                                                                                 ..
                                                                                                                                                                                                                                                                     84.4%; Score 1495; DB 2; Length 337;
85.5%; Pred. No. 1.6e-93;
                                                                                                                                                                                                                                                                                                 36; Indels
                                                                                                                                                                                                                                              337 AA; 38230 MW; 079A603551112277 CRC64;
20-MAY-2004 (TrEMBLrel. 27, Created)
20-MAY-2004 (TrEMBLrel. 27, Last sequence update)
20-MAY-2004 (TrEMBLrel. 27, Last annotation update)
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05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
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J. Biol. Chem. 279:19790-19799 (2004).
EMBL; AY191367; AAP32736.1; -.
GO; GO:0004872; F:receptor activity; IEA.
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                                       G-protein-coupled receptor 99.
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1es 288; Conservative
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PubMed=15001573;
                                                                                                                                                                                          Coupled Receptors.";
                                                                                                                            SEQUENCE FROM N.A.
                                                                                                                                                                                                      Nature 0:0-0(2004)
                                                                                                     NCBI_TaxID=10090;
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
NCBI_TaxID=10116;
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                                                                                                                                                                   38; Indels
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                                                     337 AA; 38377 MW; 9899E80DE0531CB9 CRC64;
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10-MAY-2004 (TrEMBLrel. 27, Last sequence update)
10-MAY-2004 (TrEMBLrel. 27, Last annotation update)
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                                                                                                           84.0%; Score 1487; DB 2;
85.8%; Pred. No. 5.5e-93;
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85.8%; Pred. No. 5.5e-93;
ative 10; Mismatches 38
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PROSITE; PS50262; G PROTEIN RECEP F1 2; 1.
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                                     KMRPWKSSTIIMLNLALTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFGFHFNLYSS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          STRAIN=CS7BL/6J; TISSUE=Whole body;
The FANTOM Consortium,
the RIKEN Genome Exploration Research Group Phase I & II Team;
"Analysis of the mouse transcriptome based on functional annotation of
60,770 full-length cDNAs.";
Nature 420:563-573(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata K., Itoh M., Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.; "Normalization and subtraction of cap-trapper-selected cDNAs to prepare full-length cDNA libraries for rapid discovery of new genes."; Genome Res. 10:1617-1630 (2000).
                                                                                                                                                                                                                                                                                          01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Mus musculus 8 days embryo whole body CDNA, RIKEN full-length enriched library, clone:5730548K21 product:P2Y PURINOCEPTOR 1, full insert
                                                                                                                                            241 RLTILLLIVFYVCFLPFHILRVIRIESRLLSISCSIESHIHEAYIVSRPLAALNTFGNLL
                                                                           SACLDLISSDELNTIKWYNLILTATTFCLPLVIVTLCYTTIIHTLTHGLQTDSCLKQKAR
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MEDLINE=20530913; PubMed=11076861;
Shibata K., Itoh M., Aizawa K., Nagaoka S., Sasaki N., Carninci P.,
Konno H., Akiyama J., Nishi K., Kitsunai T., Tashiro H., Itoh M.,
Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A.,
Yamamoto R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiwagi K.,
                                                                                                                                                                                                                                                                                                                                                                                                 Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          "Functional annotation of a full-length mouse cDNA collection.";
                                                                                                                                                                                             301 LYVVVSNNFQQAFCSAVRCKAIGDLEQAKKDSCSNNP 337
                                                                                                                                                                               LYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                           STRAIN=C57BL/6J; TISSUE=Whole body;
MEDLINE=99279253; PubMed=10349636;
Carninol P., Hayashizaki Y.;
Hayah-efficiency full-length cDNA cloning.";
Meth. Enzymol. 303:19-44(1999).
                                                                                                                                                                                                                                                                     373 AA
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MEDLINE=2108566; PubMed=11217851;
RIKEN FANTOM CONSOXTIUM;
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RECUENCE RECOM N.A.

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RECOMBRICE RECOM N.A.

RA Adachi U., Aizawa K., Akimura T., Arakawa T., Bono H., Carninci P.,

RA Hayabilda K., Hayatsu N., Hiramoto K., Hirackane T.,

RA Hayabilda K., Hayatsu N., Hiramoto K., Hirackane T.,

RA Hori F., Imctani K., Ishii Y., Itoh M., Kagawa I., Kasukawa T.,

RA Katoh H., Kawai J., Kojima Y., Kondo S., Konno H., Kouda M., Koya S.,

RA Kurihara C., Matsuyama T., Miyazaki A., Murata M., Ohsato N., Okazaki Y.,

RA Saito R., Saitoh H., Sakai C., Sakai K., Sakazume N., Sano H.,

RA Sasaki D., Shibata K., Numazaki R., Ohno M., Ohsato N., Okazaki Y.,

RA Sasaki D., Shibata K., Shinagawa A., Shiraki T., Sogabe Y., Tagami M.,

RA Sasaki D., Shibata K., Shinagawa A., Shiraki T., Sogabe Y., Tagami M.,

RA Domaru A., Takahashi F., Takaku-Akahira S., Takeda Y., Tagami M.,

RA Domaru A., Toya T., Shinagawa A., Shiraki T., Sogabe Y., Tagami M.,

RA Domaru A., Toya T., Shinagawa A., Shiraki Y.,

RA Domaru A., Toya T., Shinagawa A., Shiraki Y.,

RA Domaru A., Toya T., Shinagawa A., Shiraki Y.,

RA Tomaru A., Toya T., Shinagawa A., Shiraki Y.,

RA Tomaru A., Toya T., Shinagawa A., Shiraki Y.,

RA Towaru A., Toya T., Shinagawa A., Shiraki Y.,

RA Tomaru A., Toya T., Shinagawa A., Shiraki Y.,

RA Tomaru A., Toya T., Shinagawa A., Shiraki Y.,

Submitted (JUL-2001) to the EMBL/GenBank/DBU databases.

BMBL, ARII-Infergral to membrane; IRA.

GO: GO:0001584; F:rhodopsin-like receptor activity; IEA.

BR GO: GO:0001584; F:rhodopsin-like receptor activity; IEA.

BR GO: GO:0001584; F:rhodopsin-like receptor activity; IEA.

BR GO: GO:0001584; F:purnocptor.

BR InterPro: IPR000142; P2Y Durnocptor.

BR InterPro: IPR000142; P2Y Durnocptor.

BR Pfam; PP000011, 7tm I. I.

BR PFam; PP000011, 7tm I. I.

BR PP00011, 7tm I. I.
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Fujiwake S., Inoue K., Togawa Y., Izawa M., Ohara E., Watahiki M., Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J., Okazaki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y.; "RIKE integrated sequence analysis (RISA) system-384-format sequencing pipeline with 384 multicapillary sequencer."; Genome Res. 10:1757-1771(2000).
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PROSITE; PS50262; G PROTEIN RECEP F1 2; 1.
SEQUENCE 373 AA; 42228 MW; BA88124B7847287C CRC64;
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01-MAR-2001 (TrEMBLrel. 16, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
P2Y receptor.
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PRINTS; PR01157; P2YPURNOCPTR.
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373 AA;
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                                                                         A Dranoff J.A., O'Neill N. Vathanson M.H.;
A Dranoff J.A., O'Neill N. Nathanson M.H.;
Ballatori N., Boyer J.L., Nathanson M.H.;
A Ballatori N., Boyer J.L., Nathanson M.H.;
R. A printive ATP receptor from the little skate Raja erinacea.";
R. J. Biol. Chem. 275:30701-30766(2000).
B. BMBL; AF242850; AAG42684.1;
DR GO; GO:001621; C:integral to membrane; IEA.
GO; GO:0016301; C:integral to membrane; IEA.
GO; GO:001884; F:purinergic nucleotide receptor activity, G....; IEA.
GO; GO:0001884; F:rhodopsin-like receptor activity; IEA.
GO; GO:0001884; F:rhodopsin-like receptor protein signalin. ..; IEA.
INTERPRO; IPRO00276; GPCR Rhodopsn.
INTERPRO; IPRO00276; GPCR Rhodopsn.
INTERPRO; IPRO00276; P2_Durnocptor.
DR FEAM; PRO0001; 7rm 1; 1.
DR PRINTS; PRO0037; GPCRHODOPSN.
BRINTS; PRO137; GPCRHODOPSN.
BRINTS; PRO137; GPROTEIN RECEP_FI_1; UNKNOWN_1.
BROSITE; PS50262; G_PROTEIN_RECEP_FI_2; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Cavia porcellus (Guinea pig).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Hystricognathi, Cavidae, Cavia.
Elasmobranchii, Squalea, Hypnosqualea, Pristiorajea, Batoidea,
Rajiformes, Rajidae, Leucoraja.
NCBI_TaxID=7782;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        10-OCT-2003 (Rel. 42, Created)
10-OCT-2003 (Rel. 42, Last sequence update)
05-UTL-2004 (Rel. 44, Last annotation update)
P2Y purinoceptor 1 (ATP receptor) (P2YI) (Purinergic receptor).
                                                                                                                                                                                                                                                                                                                                         DB 2; Length 357;
                                                                                                                                                                                                                                                                                                                                   tch 32.6%; Score 577.5; DB 2; Length al Similarity 37.3%; Pred. No. 2.1e-31; 117; Conservative 59; Mismatches 121; Indels
                                                                                                                                                                                                                                                                                                                357 AA; 41239 MW; 14604EE15DCBDB41 CRC64;
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                                                                   MEDLINE=20459151; PubMed=10900200;
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P59902;
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                                                                                                                                                                                                                                                                                                     Receptor.
SEQUENCE
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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                          Gao N., Hu H., Zhu M.X., Wood J.D.;
"A novel P2X1 receptor in the guinea pig submucous plexus.";
Submitted (JUL-2011) to the ENBL/GenBank/DDBJ databases.
-!- FUNCTION: Receptor for extracellular adenine mucleotides such as
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   4; Gaps
                                                                                                                                                    ATP and ADP (By similarity).
--- SUBCELLULAR LOCATION: Integral membrane protein.
--- SIMILARITY: Belongs to family 1 of G-protein coupled receptors.
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Cytoplasmic (Potential).

Extracellular (Potential).

Cytoplasmic (Potential).

Cytoplasmic (Potential).

Extracellular (Potential).

Cytoplasmic (Potential).

Cytoplasmic (Potential).

Cytoplasmic (Potential).

Extracellular (Potential).

Cytoplasmic (Potential).

Cytoplasmic (Potential).

Notential).

Cytoplasmic (Potential).

Notential).

Nolinked (GLONAC. ...) (Potential).

Nolinked (GLONAC. ...) (Potential).

Nolinked (GLONAC. ...) (Potential).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      InterPro; 150001; 1600001; 1 1 1 1 PROSTER PROSTER PROSTER PROSTER PROSTER: PSTO223; G PROTEIN_RECEP_F1_2; 1 G-protein coupled receptor; Glycoprotein; Transmembrane. Batracellular (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            67; Mismatches 122; Indels
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STRAIN-Hartley; TISSUE-Small intestine;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 EMBL; AY048684; AAL05953.1; -.
InterPro; IPR000276; GPCR_Rhodpsn.
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Matches 112; Conservative
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373 AA; 42212 MW; 944125E9F4560BB3 CRC64;
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MEDLINE=22354683; PubMed=12466851;
The FANTOM Consortium,
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MEDLINE=21085660; PubMed=11217851;
RIKEN FANTOM Consortium;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    PRELIMINARY;
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                                                                                                                    Local Similarity
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BAC28413;
       SEQUENCE
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                                                                                 Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    "Thromboresistance in P2Y1 receptor knockout mice.";
Submitted (AUG-1999) to the BMBL/GenBank/DDBJ databases.
-!-FUNCTION: Receptor for extracellular adenine nucleotides such as ATP and ADP. In pancreatic islets, may mediate some of the effects of extracellular ATP on insulin secretion.
-!- SUBCELLULAR LOCATION: Integral membrane protein.
-!- SIMILARITY: Belongs to family 1 of G-protein coupled receptors.
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                                                                                                                                                                                                                                                                                                                                                                                                                             Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
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                                                                                                                                                                                                  01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
P2Y purinoceptor 1 (ATP receptor) (P2Y1) (Purinergic receptor)
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REBL; AJ245636; CAB57317.1; -.

RISSP P346966; LDDD.

MGD; MG: 105049; P2ryl.

InterPro; IPR000276; GPCR Rhodpsn.

InterPro; IPR000217; GPCR Proceptor.

InterPro; IPR002286; P2 purnocptor.

R Pfan; PF00001; Tru 1; 1.

R PROSITE; P8502237; GPCRHODOPSN.

R PROSITE; P850262; GPROTEIN REGEP F1 1; 1.

R G-Drotein coupled receptor; Glycoprofein; Transmembrane.

M G-Drotein rounded receptor; Glycoprofein; Transmembrane.

M G-Drotein rounded receptor; Glycoprofein; Transmembrane.
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6 (Potential).
Extracellular (Potential).
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Cytoplasmic (Potential).
2 (Potential).
Extracellular (Potential).
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MEDLINE=95298025; PubMed=7779087;
Tokuyama Y., Hara M., Jones E.M.C., Fan Z., Bell G.I.,
"Cloning of rat and mouse P2Y purinoceptors.";
Biochem. Biophys. Res. Commun. 211:211-218(1995).
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144 IHKTRCAVVACAVVWIISLVAVIPMTFLITSTNRTNRS-ACLDLTSSDELNTIKWYNLIL 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                  42 CALIKTGEQFYYLPAVYILVFIIGELGNSVAIWMFVFHMKFWSGISVYMFNLALADFLYV 101
                                                                                                                                                                                                                                                                        84 TSLPFLIHYYASGENWIFGDFWCKFIRFSFHFNLYSSILFLTCFSIFRYCVIIHPMSCFS 143
                                                                                                                                                                                                                                                                                                              TATTECLPLVIVILCYTTITHTLTHGLQTDSCLKQKARRLTILLLLAFYVCFLPFHILRV 262
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            263 IRIESRL---LSISCSIENQIHEAYIVSRPLAALNTFGNLLLYVVVSDNFQQAVCSTVR 318
                                                                                                                                       24 CTDENIPLKWHYLPVIYGIIFLVGFPGNAVVISTYIFKMRPWKSSTIIMLNLACTDLLYL 83
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                STRAIN=C55BL/6J; TISSUE=Cecum;
MEDLINE=20499374; PubMed=11042159;
Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata K., Itoh M.,
Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.;
"Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new genes.";
Genome Res. 10:1617-1630(2000).
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                                                                         4; Gaps
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Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Eutheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14-APR-2004 (TrEMBLrel. 27, Created)
14-APR-2004 (TrEMBLrel. 27, Last sequence update)
14-APR-2004 (TrEMBLrel. 27, Last annotation update)
Adult male cecum cDNA, RIKEN full-length enriched library,
clone:9130210N15 product:P2Y PURINOCEPTOR 1, full insert
      Length 373;
                                                                     67; Mismatches 119; Indels
12.5%; Score 575; DB 1; al Similarity 36.5%; Pred. No. 3.2e-31; 109; Conservative 67; Mismatches 119:
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MEDLINE=99279253; PubMed=10349636;
Carninci P., Hayashizaki Y.;
"High-efficiency full-length cDNA cloning.";
Meth. Enzymol. 303:19-44(1999).
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The FANTOM CONSORTIUM,
the RIKEN Genome Exploration Research Group Phase I & II Team;
the RIKEN Genome Exploration Research Group Phase I & II Team;
"Analysis of the mouse transcriptome based on functional annotation of
60,770 full-length cDNAs.";
Nature 420:563-573(2002).
                                                                                                                                                                                                                                                                                                                                                                                                           "Functional annotation of a full-length mouse cDNA collection.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN=C57BL/63; TISSUE=Bone;
MEDLINE=99279253; PubMed=10349636;
Carninci P., Hayashizaki Y;
"High-efficiency full-length cDNA c
Meth. Enzymol. 303:19-44(1999).
                                                                                                                                                                                                                                                                                                                  STRAIN=C57BL/6J; TISSUE=Bone;
MEDLINE=21085660; PubMed=11217851;
                                 MEDLINE=22354683; PubMed=12466851;
STRAIN=C57BL/6J; TISSUE=Bone;
                                                                                                                                                                                                                                                                                                                                                                                                    RIKEN FANTOM Consortium;
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CSTRAIN-CSTBL/60; TISSUB-Cecum;

Adachi J., Aizawa K., Akimura T., Arakawa T., Bono H., Carninci P.,

Radchi J., Aizawa K., Akimura T., Hara A., Hashizume W.,

Rukuda S., Furuno M., Hanaqaki T., Hara A., Hashizume W.,

Hayashida K., Hayatsu N., Hiramoto K., Hiracka T., Hirozane T.,

A Hayashida K., Imotani K., Ishii Y., Tohn M., Kagawa I., Kasukawa T.,

A Hori F., Imotani K., Ishii Y., Konno H., Konno H., Konno H.,

Katoh H., Kawai J., Kojima Y., Konno S., Konno H., Koya S.,

Kurihara C., Matsuyama T., Miyazaki A., Murata M., Nakamura M.,

Nishi K., Nomura K., Numazaki R., Ohno M., Ohsato N., Okazaki Y.,

Saito R., Saitoh H., Sakai C., Sakai K., Sakazume N., Sano H.,

Sasaki D., Shibata K., Shinagawa A., Shiraki T., Sogabe Y., Tagami M.,

Tagawa A., Takahashi F., Takaku-Akahira S., Takeda Y., Tanaka T.,

Tomaru A., Toya T., Yasunishi A., Muramatsu M., Hayashizaki Y.;

Shibate (JUL-2001) to the EMBL/GenBank/DDBJ databases.

SEQUENCE 373 AA, 42212 MW, 944125E9F4560BB3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       2;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           102 LTLPALIFYYFNKTDWIFGDAMCKLORFIFHVNLYGSILFLTCISAHRYSGVYYPLKSLG 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  144 IHKTRCAVVACAVVMIISLVAVIPMTFLITSTNRTNRS-ACLDLISSDELNTIKMYNLIL 202
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         222 TVAMFCIPLVLILGCYGLIVKALIYNDLDNSPLRRKSIYLVIIVLTVFAVSYIPFHVMKT 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   42 CALTKIGEQEYYLPAVYILVPIIGELGNSVAIMMEVEHMKFWSGISVYMENLALADELYV 101
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                                                        SIRAIN-CFRENGE FROW N.A.

STRAIN-CFRENGE, GAT TISSUE-CECUM;

MEDLINE-20330913; PubMed=11076861;

MEDLINE-20330913; PubMed=11076861;

Shibata K., Itch M., Alzawa K., Nagaoka S., Sasaki N., Carninci P.,

Konno H., Akiyama J., Nishi K., Kitsunai T., Tashiro H., Itch M.,

Sumi N., Ishihi Y., Nakamura S., Hazama M., Nishine T., Harada A.,

Yamamoto R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiwagi K.,

Yoneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J.,

Okazahi Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y.;

RIZEN integrated sequence analysis (RISA) system-384-format

Genome Res. 10:1757-1771(2000).
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llarity 36.5%; Pred. No. 3.2e-31;
Conservative 67; Mismatches 119; Indels
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                      [5]
SEQUENCE FROM N.A.
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Matches
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cDNA cloning.";

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Adachi J. Alzawa K., Akimura T., Arakawa T., Bono H., Carninci P.,
Adachi J., Alzawa K., Akimura T., Arakawa T., Bono H., Carninci P.,
Adachi J., Alzawa K., Akimura T., Hara A., Hashizume W.,
Bukuda S., Furuno M., Hiramoto K., Hiraoka T., Hirozane T.,
A Hayashida K., Ishii Y., Itoh M., Kagawa I., Kasukawa T.,
A Katoh H., Kawai J., Kojima Y., Kondo S., Konno H., Kouda M., Koya S.,
Katoh H., Kawai J., Kojima Y., Kondo S., Konno H., Kouda M., Nakamura M.,
Nishi K., Nomura K., Numazaki R., Ohno M., Ohsato N., Oksaru M.,
Saito H., Saitoh H., Sakai C., Sakai K., Sakazume N., Sano H.,
A Sasaki D., Shibata K., Shinagawa A., Shiraki T., Sogabe Y., Tagami M.,
Tagawa A., Takahashi F., Takaku-Akahira S., Takeda Y., Tanaka T.,
Tomaru A., Toya T., Yasunishi A., Muramatsu M., Hayashizaki Y.;
Submitted (UUL-2001) to the EMBL/GenBank/DDBJ databases.
SEQUENCE 373 AA, 42212 MW; 944125E9P4560BB3 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  3
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STRAIN-CSTBL/60; IISSUB-Bone;
MEDLINE=20499374; PubMed=11042159;
MEDLINE=20499374; PubMed=11042159;
Carninci P., Shibata Y., Hayatsu N., Sugahara Y., Shibata K., Itoh M.,
Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.;
Normalization and subtraction of cap-trapper-selected cDNAs to
prepare full-length cDNA libraries for rapid discovery of new genes.";
Genome Res. 10:1617-1630(2000).
                                                                                                                                                                                                                                                                                                                                                                 STRAIN=C57BL/64; TISSUB=Bone;
MEDLINE=20530913; PubMed=11076861;
Shibata K., Itoh M., Alzawa K., Nagaoka S., Sasaki N., Carninci P., Shibata K., Itoh M., Alzawa K., Nagaoka S., Sasaki N., Itoh M., Alzawa M., Alzawa M., Harada A., Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Harada A., Yamamoto R., Matsunuto H., Sakaguchi S., Ikegami T., Kashiwagi K., Fujiwake S., Inoue K., Togawa Y., Izawa M., Ohara E., Watchiki M., Foneda Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J., Okazaki Y., Muramatsu M., Inoue Y., Kira A., Hayashizaki Y., RINEN integrated sequence analysis (RISA) system-384-format Genome Res. 10:1757-1771(2000).
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Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

Mus musculus (Mouse)

seguence

SEQUENCE FROM N.A. NCBI_TaxID=10090;

14.APR-2004 (TrEMBLrel. 27, Created)
14.APR-2004 (TrEMBLrel. 27, Last sequence update)
14.APR-2004 (TrEMBLrel. 27, Last annotation update)
14.APR-2004 (TrEMBLrel. 27, Last annotation update)
Adult male bone CDNA, RIKEN full-length enriched library,
clone:9830141G17 product:P2Y PURINOCEPTOR 1, full insert

373 AA.

PRT;

PRELIMINARY;

BAC29506;

BAC29506

RESULT 11 BAC29506

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Transmembrane
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   144 IHKTRCAVVACAVVWIISLVAVIPMTFLITSTNRTNRS-ACLDLTSSDELNTIKWYNLIL 202
                 203 TATTFCLPLVIVTLCYTTIIHTLTHGLQTDSCLKQKARRLTILLLLAFYVCFLPFHILRV 262
                                                              263 IRIESRL---LSISCSIENQIHEAYIVSRPLAALNIFGNLLLYVVVSDNFQQAVCSTVR 318
                                                                                                          TISSUE=Platelet,
MEDLINE=98113162; PubMed=9442040;
Jin J., Daniel J.L., Kunapuli S.P.;
Jin J., Daniel J.L., Kunapuli S.P.;
"Molecular basis for ADP-induced platelet activation. II. The P2Y1
receptor mediates ADP-induced intracellular calcium mobilization and shape change in platelets.";
J. Biol. Chem. 273:2030-2034(1998).
J. Biol. Chem. 273:2030-2034(1998).
-!- FUNCTION: Receptor for extracellular adenine nucleotides such as ATP and ADP. In platelets binding to ADP leads to mobilization of
                                                                                                                                                                                                                                                                                                                                                                                                            MEDLINE=96158962; PubMed=8579591;
Ayyanathan K., Tania W., Harbansjit S., Raghbir A.S., Barnard E.A., Kunapuli S.P.;
"Cloning and chromosomal localization of the human P2Y1
                                                                                                                                                                                                                                                                                                                   TISSUE=Placenta;
MEDLINE=96257237; PubMed=8666290;
Leon C., Vial C., Cazenave J.-P., Gachet C.;
"Cloning and sequencing of a human cDNA encoding endothelial P2Y1
                                                                                                                                                                                                                                                             Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Euteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TISSUE-Lung;
Puhl H.L. III, Ikeda S.R., Aronstam R.S.;
Puhl H.L. III, Ikeda S.R., Aronstam R.S.;
"cDNA clones of human proteins involved in signal transduction sequenced by the Guthrie cDNA resource center (www.cdna.org).";
Submitted (JUL-2002) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SEQUENCE FROM N.A.
MEDILME=96205320; PubMed=8630005;
Janssens R., Communi D., Pirotton S., Samson M., Parmentier M.,
Boeynaems J.M.;
                                                                                                                                                                                            01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
05-JUJ-2004 (Rel. 44, Last annotation update)
P2Y purinoceptor 1 (ATP receptor) (P2Y1) (Purinergic receptor)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     "Cloning and tissue distribution of the human P2Y1 receptor.";
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Leon C., Vial C., Weber J., Cazenave J.-P., Gacher C.;
Submitted (JUN-1998) to the EMBL/GenBank/DDBJ databases.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Biochem. Biophys. Res. Commun. 218:783-788(1996).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Biochem. Biophys. Res. Commun. 221:588-593(1996).
                                                                                                                                                                           373 AA.
                                                                                                                                                                          STANDARD;
                                                                                                                                                                                                                                                                                                                                                                             Gene 171:295-297(1996).
                                                                                                                                                                                                                                                     Homo sapiens (Human)
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                                                                                                                                                                         P2YR HUMAN
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This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the Buropean Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
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MIM, 601167; --

GO, GO:0004872; E:receptor activity; TAS.

GO, GO:0007486; P:receptor activity; TAS.

GO, GO:0007166; P:receptor activity; TAS.

GO, GO:0007200; P:G-protein signaling, coupled to IP3 second . .; TAS.

InterPro; IPR000142; P2Y_purnocptor.

InterPro; IPR002286; P2_purnocptor.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               84 TSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSSILFLTCFSIFRYCVIIHPMSCFS 143
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PRIMES: PROBERS: PROCEST; GFORRHODOPSN.
PROSITE; PSC0237; GFOREN RECEP F1_1; 1.
PROSITE; PSC0262; G_PROTEIN RECEP F1_2; 1.
Blood cogqulation; G-protein coupled receptor; Glycoprotein; Platelet;
                                 change in platelet shape, and probably to platelet aggregation. SUBCELLULAR LOCATION: Integral membrane protein.
INDUCTION: Repressed by the P2Y1 receptor-specific antagonists A3P5PS, A3P5PS and A2P5P. Tetse inhibit calcium ion mobilization and shape change in platelets.
SIMILARITY: Belongs to family 1 of G-protein coupled receptors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 4; Gaps
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Cytoplasmic (Potential).
Gytoplasmic (Potential).
Extracellular (Potential).
7 (Potential).
Cytoplasmic (Potential).
By similarity.
N-linked (GlCNAc. . ) (Potential).
N-linked (GlCNAc. . ) (Potential).
N-linked (GlCNAc. . ) (Potential).
N-linked (GlCNAc. . ) (Potential).
N-linked (GlCNAc. . ) (Potential).
intracellular calcium ions via activation of phospholipase C,
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1 (Potential)
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4 (Potential).
Extracellular (Potential).
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2 (Potential).
Extracellular (Potential)
3 (Potential).
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EMBL; U42030; AAA97873.1; -.
EMBL; U42029; AAA97872.1; -.
EMBL; S81950; AAB47091.1; -.
EMBL; AJ006945; CAA07339.1; -.
EMBL; AY136752; AAN01278.1; -.
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HSSP; P34996; 1DDD.
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373 AA;
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54 VISTYIFKMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSF 113
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  233 SCLKOKARRLTILLLLAFYVCFLPFHILRVIRIESRL---LSISCSIENQIHEAYIVSRP 289
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                173 ISTNRINRSACLDLISSDELNTIKWYNLILTATTFCLPLVIVTLCYTTIHTLTHGLQTD
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01-FEB-1996 (Rel. 33, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
P2Y purinoceptor 1 (ATP receptor) (P2X1) (Purinergic receptor) (6H1
                                                                                                                                                                Extracellular (Potential).

Extracellular (Potential).

S (Potential).

Cytoplasmic (Potential).

Extracellular (Potential).

7 (Potential).

Cytoplasmic (Potential).

N-linked (GLNAc. ...) (Potential).

N-linked (GLNAc. ...) (Potential).

N-linked (GLNAc. ...) (Potential).

N-linked (GLNAc. ...) (Potential).

N-linked (GLNAc. ...) (Potential).
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Archosauria, Aves, Neognathae, Galliformes, Phasianidae, Meleagris.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          31.9%; Score 565.5; DB 1; Length 362; 35.0%; Pred. No. 1.4e-30; Live 66; Mismatches 137; Indels 11.
            Extracellular (Potential).
                                                                          2 (Potential).
Extracellular (Potential).
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                                                                                                                                             (Potential).
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                                    (Potential)
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                                                                                                                        3 (Potential
Cytoplasmic
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Matches 115; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                           144 IHKTRCAVVACAVVWIISLVAVIPMTFLITSTNRTNRS-ACLDLISSDELNTIKWYNLIL 202
                                                                                                                                    TATTFCLPLVIVTLCYTTIIHTLTHGLQTDSCLKQKARRLTILLLLLAFYVCFLPFHILRV 262
                                                                                                                                                              LILPALIFYYFNKTDWIFGDAMCKLQRFIFHVNLYGSILFLTCISAHRYSGVVYPLKSLG 161
                                                                                                                                                                                                                                                       263 IRIESRL---LSISCSIENQIHEAYIVSRPLAALNTFGNLLLYVVVSDNFQQAVCSTVR 318
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PRIMTS; PR00237; GPCRRHODOPSN.
PROSITE; PS00237; GPROTEIN RECEP_F1 1; 1.
PROSITE; PS50262; G PROTEIN RECEP_F1 2; 1.
3D-structure; G-profein coupled receptor; Glycoprotein; Transmembrane.
                                                                        Gallus gallus (Chicken).
Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Archosauria, Aves, Neognathae, Galliformes, Phasianidae, Phasianinae,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   MEDLINE=97026278; PubMed=8872457;

Van Rhee A.M., Fischer B., van Galen P.J.M., Jacobson K.A.;

Modelling the P2Y purinoceptor using rhodopsin as template.";

Modelling the P2Y purinoceptor using rhodopsin as template.";

Purg Des. Discov. 13:133-140(1995).

-!- FUNCTION: Receptor for extracellular adenine nucleotides such as AFD and ADP. Seems to mediate its action via a pertussis toxin insensitive G-protein, probably belonging to the Gq family that activate a phosphatidylinositol-calcium second messenger system.

-!- SUBCELLULAR LOCATION: Integral membrane protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Webb T.E., Simon J., Krishek B.J., Bateson A.N., Smart T.G.,
King B.F., Burnstock G., Barnard E.A.;
"Cloning and functional expression of a brain G-protein-coupled ATP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               stomach, lung and kidney. SIMILARITY: Belongs to family 1 of G-protein coupled receptors.
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                                                                                                                                                                                                                                                                                                                                                                                                                                 01-FEB-1994 (Rel. 28, Created)
01-FEB-1994 (Rel. 28, Last sequence update)
01-OCT-2004 (Rel. 45, Last annotation update)
P2Y purinoceptor 1 (ATP receptor) (P2X1) (Purinergic receptor)
                                                                                                                                                                                                                                                                                                                                                                                             362 AA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         EMBL; X73268; CAA51716.1; -.
                                                                                                                                                                                                                                                                                                                                                                                           STANDARD;
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                                                                                                                  (GlcNAc. . .) (Potential).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Cytoplasmic (Potential).

By similarity.

N-linked (GlCNAc...) (Potential).

N-linked (GlCNAc...) (Potential).

N-linked (GlCNAc...) (Potential).
                                       MEDLINE-94335907; PubMed-8058061;
Filtz T.M., Li Q., Boyer J.L., Nicholas R.A., Harden T.K.;
"Expression of a cloned P2Y purinergic receptor that couples to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (Potential)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            31.9%; Score 565.5; DB 1; Length 362; 35.0%; Pred. No. 1.4e-30;
                                                                                                                                                                                                                                                                                                                                                                                                                              Pfam; PF00001; /tm +; ...
PRINTS; PR0027; GPCRRHODDSN.
PROSITE: PF00237; GPROTEIN RECEP_F1_1; 1.
PROSITE; PS0262; G_PROTEIN_RECEP_F1_2; 1.
G-protein coupled receptor; Glycoprotein; Transmembrane.

A1 Extracellular (Potential).
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Extracellular (Potential).
7 (Potential).
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Extracellular (Potential).
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1 (Potential).
Cytoplasmic (Potential).
2 (Potential).
Extracellular (Potential)
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Cytoplasmic (Potential).
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HSSP, P34996; 1DDD.
InterPro; IPR002076; GPCR Rhodpsn.
InterPro; IPR000142; P2Y purnocptor.
InterPro; IPR002286; P2 purnocptor.
Pfam; PF00001; 7tm_1; 1.
                                                                                      Mol. Pharmacol. 46:8-14(1994)
                                                                                                                                                                                                                                                                                                                                                               EMBL; U09842; AAA18784.1; -.
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362 AA;
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Best Local Similarity
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                                                                                                           SEQUENCE FROM N.A.
                     SEQUENCE FROM N.A.
NCBI_TaxID=9103;
                                                                            phospholipase
                                  rissuE=Brain;
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66; Mismatches 137; Indels 11; Gaps

Best Local Similarity 55.07 Matches 115; Conservative

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                                                                                                                                                                                                                                                                                                                                                   114 HFNLYSSILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVACAVVWIISLVAVIPMTFLI- 172
                                                                                                                                                                                                                               121 HVNLYGSILFLTCISVHRYTGVVHPLKSLGRLKKKNAVYVSSLVWALVVAVIAPILFYSG 180
                                                                                                                                                                                                                                                                                                           TSTNRINRSACLDLISSDELNTIKWYNLILTATTFCLPLVIVTLCYTTIIHTLTHGLQTD 232
                                                                                                                                                                                                                                                                                                                                                                                                                                                               SCLKQKARRLTILLLLAFYVCFLPFHILRVIRIESRL---LSISCSIENQIHEAYIVSRP 289
54 VISTYIFKARPWKSSTIIMLALTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSF 113
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TISSUE=Insulinoma;

MEDLINE=95280025; PubMed=7779087;

Tokuyama Y., Hara M., Jones E.M.C., Fan Z., Bell G.I.;

Tokuyama Y., Hara M., Jones E.M.C., Fan Z., Bell G.I.;

Tokuyama Y., Hara M., Jones E.M.C., Fan Z., Bell G.I.;

"Cloning of rat and mouse P2Y purinoceptors.";

Biochem. Biophys. Res. Commun. 211:211-218(1995).

-! FUNCTION: Receptor for extracellular adenine nucleotides such as ATP and ADP. In pancreatic islets, may mediate some of the effects of extracellular ATP on insulin secretion.

-! SUBCELULAR LOCATION: Integral membrane protein.

-! TISSUE SPECIFICITY: Expressed in muscle, heart, liver, kidney, lung, brain, spleen, but not in testis.

-! SIMILARITY: Belongs to family 1 of G-protein coupled receptors.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Rattus norvegicus (Rat).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          01-FEB-1996 (Rel. 33, Created)
01-FEB-1996 (Rel. 33, Last sequence update)
05-JUL-2004 (Rel. 44, Last annotation update)
P2Y purinoceptor 1 (ATP receptor) (P2XI) (Purinergic receptor).
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InterPro; IRNOU2286; P2_purnocptor.
InterPro; IRNOU2286; P2_purnocptor.
InterPro; IRNOU2286; P2_purnocptor.
InterPro; IRNOU2286; P2_purnocptor.
INTERPORTE; PRO0237; GPRRHODPSN.
INTERPORTE; PRO0237; GPROTEIN_RECEP_F1_; 1.
INTERPORTE; PRO0237; GPROTEIN_RECEP_F1_; 1.
INTERPORTE; PRO0237; GPROTEIN_RECEP_F1_; 1.
INTERPORTE; PRO0237; GPROTEIN_RECEP_F1_; 1.
INTERPORTE; PRO0237; GPROTEIN_RECEP_F1_; 1.
INTERPORTE; PRO0237; GPROTEIN_RECEP_F1_; 1.
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HSSP; P34996; 1DDD.
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3 (Potential).
Cytoplasmic (Potential).
4 (Potential).
Extracellular (Potential).
5 (Potential).
Cytoplasmic (Potential).
6 (Potential).
Extracellular (Potential).
Cytoplasmic (Potential).
7 (Potential).
Cytoplasmic (Potential).
N-linked (GlcNAc. .) (Potential).
N-linked (GlcNAc. .) (Potential).
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N-linked (GlcNAc. .) (Potential).
                                                                                                                                                                                 Query Match 31.9%; Score 565; DB 1; Length 373; Best Local Similarity 36.8%; Pred. No. 1.5e-30; Matches 107; Conservative 67; Mismatches 113; Indels
  Extracellular (Potential).
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152 VACAVVWIISLVAVIPMTFLITSTNRTNRS-ACLDLISSDBLNTIKWYNLILTATTFCLP 210 170 YVSVLVWLIVVVAISPILFYSGTGIRKNKTVTCYDSTSDEYLRSYFIYSMCTTVAMFCIP 229 92 YYASGENWIFGDFMCKFIRFSFHFNLYSSILFLTCFSIFRYCVIIHPMSCFSIHKTRCAV 151 211 LVIVTLCYTTIIHTLTHGLQTDSCLKQKARRLTILLLLLAFYVCFLPFHILRVIRIESRL- 269 32 KMHYLPVIYGIIFLVGFPGNAVVISTYIFKMRPWKSSTIIMLNLACTDLLYLTSLPFLIH 91 290 FQTPEMCDENDRVXATYQVIRGLASLNSCVDPILYFLAGDTFRRLSRAIR 340 270 -- LSISCSIENQIHEAYIVSRPLAALNIFGNLLLYVVVSDNFQQAVCSTVR 318 ઠે g 8 g 셤 q à ò ò

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GenCore version 5.1.6 (c) 1993 - 2004 Compugen Ltd.
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Maximum Match 100%
Listing first 45 summaries
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

| | Description | 98-4 Sequence 4, Appli | Sequence 1, | 2 Sequence 2, | | Sequence 8, | Sequence 14, | Sequence 2, | Sequence | | | | 157-2 Sequence 2, Appli | |
|-----------|-----------------|------------------------|-----------------|------------------|-----------------|-------------|--------------|-------------|------------|------------|------------|------------|-------------------------|--|
| SUMMARIES | ID | US-09-943-798-4 | US-09-885-453-1 | US-10-023-775B-2 | US-10-270-144-2 | US-10-188- | US-10-079- | US-10-278- | US-10-017- | US-10-010- | US-10-321- | US-10-296- | US-10-375-157-2 | |
| | DB | 1 | 10 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | |
| | Watch Length DB | 337 | 337 | 337 | 337 | 337 | 337 | 337 | 337 | 337 | 337 | 337 | 337 | |
| an C | Match | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | |
| | Score | 1771 | 1771 | 1771 | 1771 | 1771 | 1771 | 1771 | 1771 | 1771 | 1771 | 1771 | 1771 | |
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| US-10-023-634-6 US-10-023-634-57 US-10-023-634-8 US-10-023-634-8 US-10-344-728-2 US-10-343-650A-14 US-10-321-807-28 US-10-321-807-28 US-10-321-807-28 US-10-25-567A-647 US-10-25-567A-647 US-10-25-567A-647 US-10-278-941-788-6 US-09-943-798-2 US-10-278-941-4 US-10-278-941-4 US-10-278-941-4 US-10-278-974C-60 US-09-943-784-1452 US-10-09-145-4 US-10-09-145-68-8 US-10-09-135-6 US-10-09-135-6 US-10-09-135-6 US-10-09-135-3 US-10-09-28-99-138-6 US-10-09-99-138-6 US-10-09-99-138-6 US-10-09-99-138-6 US-10-09-99-138-9 |
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GENERAL INFORMATION:
APPLICANT: Glaxo Group Limited
TITLE OF INVENTION: Polypeptide
FILE REFERENCE: OG1021
CURRENT APPLICATION NUMBER: US/09/943,798
CURRENT FILING DATE: 2001-08-31
NUMBER OF SEQ ID NOS: 4
SEQ ID NO 4
SEQ ID NO 4 Sequence 4, Application US/09943798 Patent No. US20020065215A1 ; ORGANISM: Homo sapiens US-09-943-798-4 LENGTH: 337 RESULT 1 US-09-943-798-4 TYPE: PRT

ALIGNMENTS

0 1 MNEPLDYLANASDFPDYAAAFGNCTDENIPLKMHYLPVIYGIIFLVGFPGNAVVISTYIF Gaps .; 0 Length 337; Indels 100.0%; Score 1771; DB 9; 100.0%; Pred. No. 3.5e-156; rative 0; Mismatches 0; Query Match Best Local Similarity 100.0 Matches 337; Conservative

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61 KWRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSS 120 61 KMRPWKSSTIIMINIACTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSS 120 121 ILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVACAVVWIISLVAVIPMTFLITSTNRTNR 180 121 ILFLICFSIFRYCVIIHPMSCFSIHKTRCAVVACAVVWIISLVAVIPMTFLITSTNRTNR 180 9 1 NNEPLDYLANASDFPDYAAAFGNCTDENIPLKWHYLPVIYGIIFLVGFPGNAVVISTYIF g g ò ò

181 SACEDLTSSDELNTIKWYNLILTATTFCLPLVIVTLCYTTIHTLTHGLQTDSCLKQKAR 240

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FILE REFERENCE: PC10959AGPR
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Best Local
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181 SACLDLTSSDELNTIKWYNLILTATTFCLPLVIVTLCYTTIIHTLTHGLQTDSCLKQKAR 240
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Publication No. US20030022282A1
GENBRAL INFORMATION:
APPLICANT: Pfizer Ltd. (EP(GB) only)
APPLICANT: Fideck, Mark David
TITLE OF INVENTION: No. US20030022282A1e1 Polypeptide
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301 LYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP 337
                                                                                                                             301 LYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP 337
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To OTHER INFORMATION: GPCRXIO amino acid sequence US-09-885-453-1
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                                                                                                                                                                                                                                                                                                                                   APPLICANT: Communi, Didier
TITLE OF INVENTION: RECEPTOR GPCRX10
FILE REFERENCE: 9409/2082
CURRENT APPLICATION NUMBER: US/09/885,453
CURRENT FILING DATE: 2001-06-20
PRIOR APPLICATION NUMBER: US 09/885,453
PRIOR PILING DATE: 2001-06-21
NUMBER OF SEQ ID NOS: 12
SOFTWARE: PatentIn version 3.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        NAME/KEY: amino acid sequence GPCRx10
                                                                                                                                                                                                                                                                        ; Sequence 1, Application US/09885453; Publication No. US20030088080A1; GENERAL INFORMATION:
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ORGANISM: Homo sapiens
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US-10-023-775B-2
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TITLE OF INVENTION: ISOLATED HUMAN G-PROTEIN COUPLED
TITLE OF INVENTION: RECEPTORS, NUCLEIC ACID MOLECULES ENCODING HUMAN GPCR
TITLE OF INVENTION: PROTEINS, AND USES THEREOF
FILE REPERRNCE: CLO00750CON
CURRENT FILING DATE: 2002-10-15
PRIOR PILING DATE: 2002-10-15
PRIOR FILING DATE: 2000-5-18
NUMBER OF SEQ ID NOS: 7
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 2
LENGTH: 337
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CURRENT APPLICATION NUMBER: US/10/023,775B
CURRENT FILING DATE: 2001-12-18
PRIOR APPLICATION NUMBER: GB 0030854.4
PRIOR FILING DATE: 2000-12-18
PRIOR FILING DATE: 2001-01-09
PRIOR PELING DATE: 2001-01-09
PRIOR PILING DATE: 2001-01-09
PRIOR PILING DATE: 2001-01-07
PRIOR PILING DATE: 2001-06-07
PRIOR APPLICATION NUMBER: GB 0111031.1
PRIOR APPLICATION NUMBER: GB 011031.1
PRIOR FILING DATE: 2001-05-04
NUMBER OF SEQ ID NOS: 4
SOFTWARE: PATENTIN VERSION 3.1
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Matches 337; Conservative
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US-10-270-144-2
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Sequence 14, Application US/10079384

Publication No. US20030108986A1

GENERAL INFORMATION:
TITLE OF INVENTION: COMPOSITIONS AND METHODS COMPRISING G-PROTEIN COUPLED RECEPTORS
TITLE OF INVENTION: COMPOSITIONS AND METHODS COMPRISING G-PROTEIN COUPLED RECEPTORS
FILE REFERENCE: 9409/2132
CURRENT APPLICATION NUMBER: US/10/079,384
CURRENT FILING DATE: 2002-02-20
PRIOR FILING DATE: 2001-06-20
PRIOR FILING DATE: 2001-06-20
NUMBER OF SEQ ID NOS: 50
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241 RLTILLLLAFYVCFLPFHILRVIRIESRLLSISCSIENQIHEAYIVSRPLAALNTFGNLL 300
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TRIBOULEY, Catherine M.
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Publication No. US20030138818A1
GENERAL INFORMATION:
APPLICANT: PATTERSON, Chandra
APPLICANT: LU, Dyung Alna M.
APPLICANT: THORNTON, Michael
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KHAN, Farrah A.
GANDHI, Ameena R.
WALIA, Narinder K.
NGUYEN, Danniel B.
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APPLICANT:
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; Deducation No. US20030082585A1
; BENERAL INFORMATION:
; APPLICANT: Tian, Hui
APPLICANT: Chen, Jin-Long
; APPLICANT: Chen, Jin-Long
; APPLICANT: Chen, Jin-Long
; APPLICANT: Chen, Jin-Long
; APPLICANT: Chen, Jin-Long
; APPLICANT: Chen, Jin-Long
; APPLICANT: Chen, Jin-Long
; APPLICANT: Chen, Jin-Long
; APPLICANT: Chen, Jin-Long
; APPLICANT: Cher, Gene
; TITLE OF INVENTION NOW BER: US/10/188, 405
; CURRENT APPLICATION NOWBER: US/10/188, 405
; CURRENT FILING DATE: 2002-07-01
; PRIOR FILING DATE: 2001-07-03
; NUMBER: OF SEQ ID NOS: 25
; SOFTWARE: PATENTIN OF VET: 2.1
; TEMPORE: PATENTIN OF VET: 2.1
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US-10-188-405-8
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ORGANISM: Homo sapiens
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US-10-188-405-8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      ; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No. US20030138818A1 6575963CD1
US-10-278-141-2
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                                                                                                                              APPLICANT: TANG, Y. Tom
APPLICANT: AU-YOUNG, Janice
TITLE OF INVENTION: G-PROTEIN COUPLED RECEPTORS
FILE REFERENCE: PI-0096 USA
                                                                                                                                                                                                          FILE KMEEKENLE: FILOUSE USA
CURRENT PAPLICATION NUMBER: USA
CURRENT FILING DATE: 2002-10-21
PRIOR APPLICATION NUMBER: 60/208,834
PRIOR FILING DATE: 2000-06-02
PRIOR FILING DATE: 2000-05-25
PRIOR PILING DATE: 2000-05-25
PRIOR PILING DATE: 2001-05-17
PRIOR PILING DATE: 2001-05-17
PRIOR APPLICATION NUMBER: 60/205,628
PRIOR PILING DATE: 2001-05-18
PRIOR PILING DATE: 2000-05-18
PRIOR PILING DATE: 2000-06-02
PRIOR PILING DATE: 2000-06-02
PRIOR PILING DATE: 2000-06-02
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PRIOR PILING DATE: 2000-06-02
PRIOR PILING DATE: 2000-06-22
PRIOR PILING DATE: 2000-05-22
PRIOR PILING DATE: 2000-05-22
PRIOR PILING DATE: 2000-05-22
                                                             LAL, Preeti
REDDY, Roopa
KALLICK, Deborah A.
TANG, Y. Tom
                   HAFALIA, April
ELLIOTT, Vicki S.
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Best Local Similarity 100.0
Matchee 337; Conservative
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YUE, Henry
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US-10-017-161-526

Sequence 526, Application US/10017161

Publication No. US20030143668A1

GENERAL INFORMATION:

APPLICANT: SUWA, MAKIKO

APPLICANT: ASAI, KIYOSHI

APPLICANT: AKIYAMA, YUTAKA

APPLICANT: ABURATANI, HIROYUKI

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US-10-10-568-2

| Sequence 2, Application US/10010568 |
| Sequence 2, Application US/10010568 |
| Publication No. US20030157598A1 |
| GENERAL INFORMATION: APPLICANT: Bristol-Myers Squibb Company |
| TITLE OF INVENTION: KIDNEY |
| TITLE OF INVENTION: KIDNEY |
| FILE REFERENCE: D0077 NP |
| CURRENT APPLICATION NUMBER: US/10/010,568 |
| CURRENT PILLING DATE: 2001-12-07 |
| PRIOR FILLING DATE: 2000-12-07 |
| PRIOR FILLING DATE: 2001-12-07 |
| PRIOR FILLING DATE: 2001-12-07 |
| PRIOR FILLING DATE: 2001-02-14 |
| NUMBER OF SEQ ID NOS: 55 |
| SOFTWARE: PatentIn version 3.0
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Best Local Similarity 100.0%; Pred. No. 3.5e-156;
Matches 337; Conservative 0; Mismatches 0; Indels 0;
TITLE OF INVENTION: NOVEL G PROTEIN-COUPLED RECEPTORS
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                   FILE REFERENCE: 084335/0152
CURRENT APPLICATION NUMBER: US/10/017,161
CURRENT FILING DATE: 2002-12-18
FRIOR APPLICATION NUMBER: UP 2001/246789
PRIOR FILING DATE: 2001-06-18
NUMBER OF SEQ ID NOS: 2430
SEQ ID NO 526
                                                                                                                                                                                                                                                                                                                                                                                                                                  Query Match
Best Local Similarity 100.
Matches 337; Conservative
                                                                                                                                                                                                                                                                                                             ; TYPE: PRT
; ORGANISM: Homo sapiens
US-10-017-161-526
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US-10-010-568-2
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| Db 61 KWRPWKSSTIIMLALGTDLLYTSLPFLHYYASGENWIFGDFWCKFIRFSPHFNLYSS 120 CY 121 ILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVACAVWHISLVAVIPMTFLITSTRRTRR 180 121 ILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVACAVWHISLVAVIPMTFLITSTRRTRR 180 CY 181 SACLDLTSSDELNTIKWYNLILTATTFCLPLVIVTLCYTTHIHTLTHGLQTDSCLKQKAR 240 Db 181 SACLDLTSSDELNTIKWYNLILTATTFCLPLVIVTLCYTTHIHTLTHGLQTDSCLKQKAR 240 CY 241 RLTILLLIAFYVCFLPFHILRVIRIESRILSISCSIENQIHEAYIVSRPLAALNTFCNLL 300 CY 241 RLTILLLLAFYVCFLPFHILRVIRIESRILSISCSIENQIHEAYIVSRPLAALNTFCNLL 300 CY 301 LYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP 337 Db 301 LYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP 337 | 22 A X X D | APPLICANT: NUBLY, Dannel B. APPLICANT: HAFALIA, April APPLICANT: ELIOTY, Vicki S. APPLICANT: ELIOTY, Vicki S. APPLICANT: ELIOTY, Vicki S. APPLICANT: APLICANT: MALOTY APPLICANT: APLICAN Deborah A. APPLICANT: ALI-ICK, Deborah A. APPLICANT: ALI-ICK, Deborah A. APPLICANT: ALI-ICK, Deborah A. APPLICANT: ALI-ICK, Deborah A. APPLICANT: ALI-ICK, Deborah A. APPLICANT: ALI-ICK, Janice TITLE OF INVENTION: G-PROTEIN COUPLED RECEPTORS TITLE OF INVENTION G-PROTEIN COUPLED RECEPTORS TITLE OF INVENTION WIMBER: US/10/296,081 CURRENT APPLICATION NUMBER: US/10/296,081 CURRENT FILING DATE: 2000-05-11-18 FRIOR FILING DATE: 2000-05-18; 2000-05-22; 2000-06-02; 2000-06-02 NUMBER OF SEQ ID NOS: 16 SEQ ID NO 2 LENGTH: 337 TYPE: PRT CRGANISM: Homo sapiens FEATURE: NAME/KEY: misc feature MANE/KEY: misc feature CUTHER INFORMATION: Incyte ID No. US20030220477AI 6575963CD1 US-10-296-081-2 | Query Match 100.0%; Score 1771; DB 14; Length 337; Best Local Similarity 100.0%; Pred. No. 3.5e-156; Adoles 0; Gaps 0; Matches 337; Conservative 0; Mismatches 0; Indels 0; Gaps 0; Qy 1 MNEPLDYLANASDPPDYAAAFGNCTDENIPLKWHYLPVIYGIIFLVGFPGNAVVISTYIF 60 Db 1 MNEPLDYLANASDPPDYAAAFGNCTDENIPLKWHYLPVIYGIIFLVGFPGNAVVISTYIF 60 Qy 61 KMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSS 120 Db 61 KMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSS 120 |
|--|--|--|---|
| | RESULT 10 US-10-321-807-28 ; Sequence 28, Application US/10321807 ; Publication No. US20030166148A1 ; GENERAL INFORMATION: ; APPLICANT: Chen, Rupong ; APPLICANT: Chen, Rupong ; APPLICANT: Lowitz, Kevin P. ; TITLE OF INVENTION: No. US20030166148A1-Endogenous, Constitutively Activated Human G; ; TITLE DE INVENTION: Receptors ; FILE REFERENCE: ARENO086 ; CURRENT FILING DATE: 2002-12-16 ; DELOS ADELICATION NUMBER: US/10/321,807 ; DELOS ADELICATION NUMBER: US/10/31,907 | FRICK FILING DATE: 2000-11-16 PRIOR FILING DATE: 2000-11-16 PRIOR PELICATION NUMBER: 09/170,496 PRIOR APPLICATION NUMBER: 09/170,496 PRIOR PLING DATE: 2000-04-20 PRIOR APPLICATION NUMBER: 60/166,088 PRIOR FILING DATE: 1999-11-17 PRIOR FILING DATE: 1999-11-17 PRIOR FILING DATE: 1999-11-17 PRIOR PLING DATE: 1999-11-17 PRIOR APPLICATION NUMBER: 60/166,369 PRIOR FILING DATE: 1999-11-17 PRIOR APPLICATION NUMBER: 60/171,902 PRIOR APPLICATION NUMBER: 60/171,902 PRIOR PILING DATE: 1999-12-23 PRIOR PILING DATE: 1999-12-23 PRIOR PILING DATE: 1999-12-23 PRIOR PILING DATE: 1999-12-23 PRIOR PILING DATE: 1999-12-23 PRIOR PILING DATE: 1999-12-23 PRIOR PILING DATE: 1999-12-23 PRIOR PILING DATE: 1999-12-23 PRIOR PILING DATE: 1999-12-23 PRIOR PILING DATE: 1999-12-23 PRIOR PILING DATE: 1999-12-23 PRIOR PILING DATE: 1999-13-33 PRIOR PILING DATE: 1999-13-33 PRIOR PILING DATE: 1999-13-33 PRIOR PILING DATE: 1999-13-33 PRIOR PILING DATE: 1999-13-33 PRIOR PILING DATE: 1999-13-37 PRIOR PILING DATE: 2000-02-11 PRIOR PILING DATE: 2000-02- | ; TYPE: PRT ; ORGANISM: Homo sapiens US-10-321-807-28 Query Match Query Match Best Local Similarity 100.0%; Pred. No. 3.5e-156; Matches 337; Conservative 0; Mismatches 0; Indels 0; Gaps 0; MNEPLDYLANASDFPDYAAAFGNCTDENIPLEOHYLPVIYGIFLYGFPGNAVVISTYIF 60 ON 1 MNEPLDYLANASDFPDYAAAFGNCTDENIPLEOHYLPVIYGIIFLYGFPGNAVVISTYIF 60 Db 1 MNEPLDYLANASDFPDYAAAFGNCTDENIPLEOHYLPVIYGIIFLYGFPGNAVVISTYIF 60 Qy 61 KMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSS 120 |

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| APPLICANT: SUWA, MAKIKO |
| APPLICANT: SUWA, MAKIKO |
| APPLICANT: ASAI, KIYOSHI |
| APPLICANT: ASAI, KIYOSHI |
| APPLICANT: ASAI, KIYOSHI |
| APPLICANT: ASAI, KIYOSHI |
| APPLICANT: ALIMAA, YUTAKA |
| TILLE OF INVENTION: GUANOSINE TRIPHOSPHATE-BINDING PROTEIN COUPLED RECEPTORS |
| FILE REFERENCE: 084335/166 |
| CURRENT APPLICATION NUMBER: US/10/292,798 |
| CURRENT FILING DATE: 2002-11-13 |
| PRIOR FILING DATE: 2001-12-18 |
| PRIOR FILING DATE: 2001-06-18 |
| PRIOR FILING DATE: 2001-06-18 |
| NUMBER OF SEQ ID NOS: 2070 |
| SOFTWARE: Patentin Ver. 2.1 |
| SEQ ID NO 464 |
| LINGTH: 337 |
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICANT: Shimkets, Richard A APPLICANT: Colman, Steven D APPLICANT: Spyrek, Kimberly A APPLICANT: Ballinger, Robert A APPLICANT: Govern Colman APPLICANT: Tchernev, Veliaar T APPLICANT: Shenoy, Suresh G
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Gusev, Vladimir Y
Burgess, Catherine E
Edinger, Shlomit R
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Zerhusen, Bryan.
Patturajan, Meera
Patturajan, Stacie J
Casman, Stacie J
                             Publication No. US20030235833A1
GENERAL INFORMATION:
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Publication No. US20030224458A1
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ORGANISM: homo sapiens
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## TITLE OF INVENTION: Using the Same
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## TILL OF INVENTION: Using the Same
## CURRENT APPLICATION NUMBER: 60/256,025
## PRIOR PELLING DATE: 2000-12-15
## PRIOR PELLING DATE: 2001-01-30
## PRIOR FILLING DATE: 2001-01-30
## PRIOR PELLING DATE: 2001-03-02
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## NUMBER OF SEQ ID NOS: 132
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Malyankar, Uriel M
Gunther, Erik
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Matches 337; Conservative
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ORGANISM: Homo sapiens
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US-10-023-634-57, Application US/10023634; Sequence 57, Application US/10023634; Publication No. US20030236389A1; GENERAL INFORMATION: Shimkets, Richard A APPLICANT: Colman, Steven D

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180
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APPLICANT: Millet, Isabelle
APPLICANT: Gerlach, Valerine
APPLICANT: Gerlach, Valerine, Polynucleotides Encoding Them and Methods of
TITLE OF INVENTION: Using the Same
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CURRENT APPLICATION NUMBER: US/10/023,634
CURRENT PILING DATE: 2002-06-28
PRIOR PILING DATE: 2002-06-28
PRIOR FILING DATE: 2000-12-15
PRIOR FILING DATE: 2001-01-30
PRIOR FILING DATE: 2001-01-30
PRIOR APPLICATION NUMBER: 60/272,929
PRIOR APPLICATION NUMBER: 60/274,864
PRIOR FILING DATE: 2001-03-02
PRIOR APPLICATION NUMBER: 60/274,864
PRIOR FILING DATE: 2001-03-09
PRIOR FILING DATE: 2001-03-09
PRIOR FILING DATE: 2001-03-09
PRIOR FILING DATE: 2001-03-16
PRIOR APPLICATION NUMBER: 60/276,880
PRIOR FILING DATE: 2001-03-22
PRIOR FILING DATE: 2001-03-22
PRIOR FILING DATE: 2001-03-25
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Edinger, Shlomit R
Gangolli, Esba A
Malyankar, Uriel M
Gunther, Erik
Ballinger, Robert A
Guo, Xiaojia
                                                       Ichernev, Velizar T
                                                                                                                                                  Zerhusen, Bryan D
Patturajan, Meera
Casman, Stacie J
Boldog, Ferenc
Gusev, Vladimir Y
                                                                              Shenoy, Suresh G
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SEQ ID NO 57
LENGTH: 337
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Ellerman, Karen
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Matches 337;
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- 241 RLTILLLLAFYVCFLPFHILRVIRIESRLLSISCSIENQIHEAYIVSRPLAALNTFGNLL 300 g
- 301 LYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP 337 301 LYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP 337

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Search completed: October 29, 2004, 15:07:49 Job time : 144 secs

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coupled receptor; GPCR; hRUP21; agonist; lung cancer.
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2000US-019589BP-
2000US-0196078P-
2000US-0196078P-
2000US-0206419P-
2000US-0210741P-
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2000US-0242343P.
2000US-0243019P.
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inverse agonist;
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23-DEC-1999;
14-MAR-2000;
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10-APR-2000;
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10-APR-2000;
10-APR-2000;
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12-MAY-2000; 2
12-JUN-2000; 2
12-JUN-2000; 2
21-AUG-2000; 2
26-SEP-2000; 3
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Abb83819 Human P
Abg70271 Human P
Aao14027 Human P
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1771
1 MNEPLDYLANASDFPDYAAA......RCKVSGNLEQAKKISYSNNP
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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                                                                                                                                                         2002273 seqs, 358729299 residues
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Listing first 45 summaries
                                    OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Lowitz KP;

| Abp54316 Human P2Y | ABP54316 | Ŋ | 373 | 32.0 | 267 | 45 |
|--------------------|----------|----|-----|------|--------|----|
| Human P | AAE04389 | 4 | 373 | 32.0 | 267 | 44 |
| Mouse | ADO29593 | 8 | 373 | 32.5 | 575 | 43 |
| Mouse | ADF43212 | 00 | 373 | 32.5 | 575 | 42 |
| Human | ABG93776 | 5 | 192 | 47.0 | 831.5 | 41 |
| Human | AAG80958 | 4 | 192 | 47.0 | 831.5 | 40 |
| Aam80281 Human pro | AAM80281 | 4 | 179 | 49.8 | 881.5 | 39 |
| | ABB11082 | 4 | 179 | 49.8 | 881.5 | 38 |
| Human | AAM79297 | 4 | 230 | 62.2 | 1102 | 37 |
| Abb83818 Human P2Y | ABB83818 | 5 | 276 | 81.5 | 1444 | 36 |
| Adm10578 Rat P2Y25 | ADM10578 | 8 | 337 | 84.0 | 1487 | 35 |
| Aae33316 Mouse TAR | AAE33316 | 9 | 338 | 84.4 | 1495 | 34 |
| | ADO29443 | œ | 337 | 84.4 | 1495 | 33 |
| | ADM10576 | ထ | 337 | 84.4 | 1495 | 32 |
| | ADC12674 | 7 | 330 | 9.68 | 1586 | 31 |
| Human | ABG93789 | Ŋ | 336 | 90.5 | 1602.5 | 30 |
| Aag80971 Human nGP | AAG80971 | 4 | 336 | 90.5 | 1602.5 | 53 |
| Human | ADC25998 | 7 | 337 | 98.9 | 1751 | 28 |
| Human | ADH68217 | œ | 337 | 9.66 | 1764 | 27 |
| - | ABP81736 | 9 | 337 | 9.66 | 1764 | 56 |

ALIGNMENTS

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The sequence represents a human G-protein coupled receptor (GPCR), hRUP21. The endogenous and non-endogenous, constitutively activated versions of human G-protein coupled receptors (GPCR), are useful for direct identification of candidate compounds as receptor agonists, inverse agonists or partial agonists having applicability as therapeutic agents for treating diseases related to GPCR, e.g. lung cancer. Non-endogenous version of human GPCRs are also utilized in research settings and in vitro and in vivo system, incorporating GPCRs can be utilised to cludidate and understand the roles these receptors play in the human condition, both normal and diseased
                                                                                                                                                        Endogenous and non-endogenous versions of human G-protein coupled receptors for direct identification of candidate compounds as agonists, inverse agonists or partial agonists for use as therapeutic agents.
                                                                                                                                                                                                                                                                                                                                                                        Claim 53; Page 114-115; 160pp; English.
WPI; 2001-355616/37.
                                                  N-PSDB; AAS07948
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 337 AA;
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ö 120 180 RLTILLLLAFYVCFLPFHILRVIRIESRLLSISCSIENQIHEAYIVSRPLAALNTFGNLL 300 9 9 KWRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSS KMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSS ILFLTCESIFRYCVIIHPMSCFSIHKTRCAVVACAVVWIISLVAVIPMTFLITSTNRTNR 1 MNEPLDYLANASDFPDYAAAFGNCTDENIPLKMHYLPVIYGIIFLVGFPGNAVVISTYIF 1 MNEPLDYLANASDFPDYAAAFGNCTDENIPLKMHYLPVIYGIIFLVGFPGNAVVISTYIF ILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVACAVWIISLVAVIPMTFLITSTNRTNR SACLDLISSDELNTIKWYNLILTATTFCLPLVIVTLCYTTIHTLTHGLQTDSCLKQKAR Gaps 0: 100.0%; Score 1771; DB 4; Length 337; 100.0%; Pred. No. 1.1e-194; cive 0; Mismatches 0; Indels 0; 301 LYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP 337 301 LYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP 337 Best Local Similarity 100. Matches 337; Conservative 241 Query Match Best Local S 61 61 121 181 q g g g ò à 8 à à

AAE16171 standard; protein; 337 AA (first entry) 26-MAR-2002 AAE16171; RESULT 2 AAE1617

Human G-protein coupled receptor 2 (GCREC-2) protein.

Human; G-protein coupled receptor 2; cell proliferative disorder; arteriosclerosis; hepatitis; cancer; neurological disorder; epilepsy; Alzheimer's disease; Parkinson's disease; cardiovascular disorder; atherosclerosis; hypertension; myocardial infarction; peptic ulcer; gastrointestinal disorder; dysphagia; anorexia; autoimmune deficiency syndrome; inflammatory disorder; hadison's disease; allergy; Grave's disease; metabolic disorder; AlDS; diabetes; obesity; osteoporosis; gene therapy; GCREC-2. Homo sapiens

Location/Qualifiers Key

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The invention relates to numen G-protein coupted receptor (GAREC)

polypeptides and polymucleotides. GCREC polypeptides are useful for acreening compounds that modulate their activity. They are useful in the diagnosis, prevention and treatment of disorders which include cell proliferative disorders such as arteriosclerosis, hepatitis.

proliferative disorders such as repress, hepatitis, cataloma, leukaemia, proliferative disorders such as epilepsy, ischaemic cerebrovascular disorders such as epilepsy, ischaemic cerebrovascular disorders such as terriovences, parterial and viral meninglis, Creutzfeldt-Jakob disease, schizophrenic disorders, ammesia; catdiovascular disorders such as arteriovenous fistula, atherosclerosis, hypertension, vascular tumours, myocardial infarction, hypertensive heart cardiovascular disorders such as dysphagia, peptic ocsophagitis, cardiovascular disorders such as dysphagia, peptic ocsophagitis, cardiovascular disorders such as dysphagia, peptic ocsophagitis, constipation, acquired immune deficiency syndrome (AIDS), hepatic constipation, acquired immune deficiency syndrome (AIDS), hepatic constipation, acquired immune deficiency syndrome (AIDS), hepatic compatipation, acquired immune deficiency syndrome (AIDS), hepatic compatipation, acquired immune deficiency syndrome (AIDS), hepatic constipation, acquired intermity in a disease, allergies, spondylitis, amyloidosis, anaemia, asthma, contact constipation, parasitic, protozoal and helminchic infections and trauma; cemphysema, Grave's disease, gout, multiple sclerosis, rheumatoid cuptane; parasitic, protozoal and helminchic infections and trauma; metations such as diabetes mellius, viral, bacterial, cuptane, bunyavirus, bunyavirus, bunyavirus, bunyavirus, bunyavirus, bunyavirus, bunyavirus, bunyavirus, bunyavirus, bunyavirus, bunyavirus, bunyavirus, bunyavirus, bunyavirus, bunyavirus, bunyavirus, bunyavirus, bunyavirus, bunyavirus, bunyavirus, benyavirus, propersis, bunyavirus, benyavirus, propersis, bunyavirus, propersis, propersis, prop
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Novel G-protein coupled receptors and polynucleotides useful for diagnosis, treatment and prevention of disorders of cell proliferation, neurological, cardiovascular, metabolic disorders and viral infections.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          1 MNEPLDYLANASDFPDYAAAFGNCTDENIPLKMHYLPVIYGIIFLVGFPGNAVVISTYIF
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                                                                                                                                                                                                                                                                                                                                                                                                                       CM, Graul R;
Hafalia A;
                                                                                                                                                                                                                                                                                                                                                                                                               Patterson C, Lu DAM, Thornton M, Lu Y, Tribouley CM, Graul R;
Khan FA, Gandhi AR, Walia NK, Nguyen DB, Yue H, Hafalia A;
Elliott VS, Lal P, Reddy R, Kallick DA, Tang TY, Au-Young J;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           The invention relates to human G-protein coupled receptor (GCREC)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 1771; DB 5; Length 337; 100.0%; Pred. No. 1.1e-194;
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                    "Transmembrane domain"
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Claim 1; Page 104-105; 115pp; English.
                                                                                                                                                                                                                                           22-MAY-2000; 2000US-0206222P.
25-MAY-2000; 2000US-0207566P.
2-UJN-2000; 2000US-0208834P.
02-UJN-2000; 2000US-0208861P.
                                                                                                                                                                                                                       18-MAY-2000; 2000US-0205628P.
                                                                                                                                                                     17-MAY-2001; 2001WO-US016285
                                                                                                                                                                                                                                                                                                                                                                     (INCY-) INCYTE GENOMICS INC
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Matches 337; Conservative
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35.
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                                                                      WO200187937-A2.
                                                                                                                       22-NOV-2001
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cough, sepsis, food poisoning, pneumonia, wound infection, dysentery), vascular disorders and lymphatic disorders. This sequence represents the human HGPRBMY23 polypeptide
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06-SEP-2000; 2000GB-00021894.
25-SEP-2000; 2000GB-00023444.
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Matches 337; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           New G-protein coupled receptor HGPRBMY23 polypeptide and polynucleotides, useful for diagnosing, prognosing, preventing, treating renal, immune, hyperproliferative and cardiovascular disorders and identifying
                                         SACEDETSSDELNTIKWYNELETATTFCEPIVIVTECYTTIIHTETHGEQTDSCEKQKAR 240
                                                                                                                                                                                                                                      RLTILLLLAFYVCFLPFHILRVIRIESRLLSISCSIENQIHEAYIVSRPLAALNTFGNLL 300
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           ILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVACAVVWIISLVAVIPMTFLITSTNRTNR 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              renal disorder; pulmonary disease; neural disorder; heart defect; male reproductive disorder; hyperproliferative disorder; inflammation; lymphoproliferative disease; autoimmune disease; bacterial infection; fungal infection; parasitic infection; vascular disorder; receptor;
                                                                                                                       SACLDLTSSDELNTIKWYNLILTATTFCLPLVIVTLCYTTIIHTLTHGLQTDSCLKQKAR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; G-protein coupled receptor; HGPRBMY23; receptor; GPCR; cancer;
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14-FEB-2001; 2001US-0269795P.
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N-PSDB; ABS59232.
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                                                                     1 MNEPLDYLANASDFPDYAAAFGNCTDENIPLKMHYLPVIYGIIFLVGFPGNAVVISTYIF
                                                                                                       1 MNEPLDYLANASDFPDYAAAFGNCTDENIPLKMHYLPVIYGIIFLVGFPGNAVVISTYIF
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                                                                                                                                             KMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSS
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                                                                                                                                                                                                                                                                                          181 SACLDLISSDELNTIKWYNLILTATTFCLPLVIVTLCYTTIIHTLTHGLQTDSCLKQKAR
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                                     Gaps
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Length 337;
                                   Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                       301 LYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP 337
100.0%; Score 1771; DB 5; 100.0%; Pred. No. 1.1e-194;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                            Human P2Y-like receptor variant SEQ ID NO 4.
                                 0; Mismatches
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The invention relates to an isolated P2Y-like receptor polypeptide MSB83818-ABB83819) which is also referred to in the specification as HIPHUM 0000037. An effective amount of a substance (agonist or antagonist) which modulates P2Y receptor activity is useful to treat a subject having a disorder that is responsive to P2Y-like receptor acubstance may also be used to manufacture a medicine for the treatment or prophylaxis of a disorder that is responsive to stimulation or modulation of P2Y-like receptor activity. Disorders which may be treated include colon cancers, asthma, COPD, Crohn's disease, irritable bowel syndrome, gastroenteritis and collits, inflammatory bowel syndrome, colicis, rheumatoid arthritis, viral diseases, bacterial infections,
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                                                                                                                                                                                                                                                                                                                                                                       autoimmune diseases, dermatitis, glomerulonephritis allergies, allergic rhinitis, inflammatory pain and general inflammation such as tendonitis, polymyositis or prostatitis. The invention provides alternative
                                                                                                                                                                                                                                                                                                                                                                                                                                              substances for the treatment of immunological and inflammatory diseases
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1 MNEPLDYLANASDFPDYAAAFGNCTDENIPLKMHYLPVIYGIIFLVGFPGNAVVISTYIF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MNEPLDYLANASDFPDYAAAFGNCTDENIPLKMHYLPVIYGIIFLVGFPGNAVVISTYIF
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treat an immune or inflammatory disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        0; Mismatches
                                              Claim 1; Page 30-31; 35pp; English.
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337; Conserv
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                                61 KMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSS 120
                                                                                                                                                                                                                     RLTILLLLAFYVCFLPFHILRVIRIESRLLSISCSIENQIHEAYIVSRPLAALNTFGNLL 300
                                                                                                                                                                   SACLDLTSSDELNTIKWYNLILTATTFCLPLVIVTLCYTTIHTLTHGLQTDSCLKQKAR
                                                                                                                                                                                                                                             241 RLTILLLLAFYVCFLPFHILRVIRIESRLLSISCSIENQIHEAYIVSRPLAALNTFGNLL
61 KMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSS
                                                                      121 ILFLICESIFRYCVIIHPMSCFSIHKTRCAVVACAVVWIISLVAVIPMTFLITSTNRTNR
                                                                                                                                              SACLDLISSDELNTIKWYNLILIATTFCLPLVIVTLCYTTIIHTLTHGLQTDSCLKQKAR
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acoustic trauma; cardiomyopathy; atherosclerosis; hypertension; congenital heart defect; scleroderma; endometriosis; haemophilia; dementia; stroke; Parkinson's disease; Huntington's disease; epilepsy; multiple sclerosis; anxiety; pain; leukaemia; hypothyroidism; psoriasis; acne; wound; asthma; human disease; calpain; epsin; zinc finger; low density lipoprotein B; LDLB; purinoceptor; CG8841; synaptotagmin;
                                                                                                                                                                                                                                                       Von Hippel-Lindau syndrome; cirrhosis; transplantation disorder; pancreatifus, obesity; diabotes; autoimmune disease; infertility, renal artery stenosis; interstitial nephritis; glomerulonephritis; polycystic kidney disease; cataract; Alzheimer's disease; cancer,
                                                                                                                                                                                                                                    Human; NOVX; pathological condition; NOVX-associated disorder;
                                         ABG70271 standard; protein; 337 AA
                                                                                                                                                                                     Human Purinoceptor-like protein.
                                                                                                                                         (first entry)
                                                                                                                                      05-NOV-2002
                                                                                          ABG70271;
RESULT 5
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Spytek KA, Gilbert J, Casman S, Blalock A, Li L;
Shenoy S, Mishra V, Furtak K, Gerlach V, Edinger S;
Stone D, Millet I, Smithson G, Gunther E, Padigaru M;
                                                                                                                                                                                                                    Blalock A, Li L, L, L, L, L, L, L, Edinger S;
serine protease TLSP; mitogen activated protein kinase kinase-2; glypican-2 precursor; thymosin beta-10.
                                                                                                           2000US-0244443P-2000US-0244443P-2000US-0244443P-2000US-024503P-2000US-0245315P-2000US-0245316P-2000US-0245316P-
                                                                                              2000US-0243642P.
2000US-0243681P.
                                                                                                                                                                       2001US-0269056P.
                                                                                                                                                                              2001US-0272923P.
2001US-0276565P.
                                                                 26-OCT-2001; 2001WO-US050925
                                                                                                                                                                2001US-0262994P
                                                                                                                                                                                              07-SEP-2001; 2001US-0318119P
                                                                                                                                                                                                           (CURA-) CURAGEN CORP.
                                     WO200255702-A2.
                       Homo sapiens.
                                                                                                                                                                                                                         Gangolli EA,
                                                                               26-OCT-2000;
                                                                                                             27-OCT-2000;
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                                                    18-JUL-2002
                                                                                                                                                                                     15-MAR-2001
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Isolated NOVX polypeptides and nucleic acid molecules useful for treating, preventing, diagnosing and researching pathological conditions in humans with a NOVX-associated disorders, e.g. cancer, stroke or Anderson D; 2002-590673/63. N-PSDB; ABK51678 Vernet CAM, Malyankar U, Taupier RJ,

Claim 1; Page 32; 236pp; English.

Alzheimer's disease.

Cardiomyopathies, atheroselerosis, hypertension, congenital heart defects, scleroderma, endometriosis, haemophilia, dementia, stroke, Parkinson's disease, Huntington's disease, epilepsy, multiple sclerosis, anxiety, pain, leukaemias, hypothyroidism, psoriasis, acne, wounds and asthma. They are also useful for the manufacture of a medicament for treating a syndrome associated with a human disease, specificant associated disorder. They may also be useful in therapeutic applications including protein therapy, as small molecule drug targets, as antibody targets, as diagnostic and/or prognostic markers, in gene therapy, as research tools and in tissue regeneration. The present amino acid sequence represents one of the 17 novel proteins of the invention The present invention relates to a new polypeptide that comprises any of 17 fully defined sequences of 43-990 amino acids given in the specification. The NOVX polypeptide, nucleic acid and antibody of the invention are useful for treating or preventing a pathological condition in humans with a NOVX-associated disorder, e.g. Von Hippel-Lindau syndrome, cirrhosis, transplantation disorders, pancreatitis, obesity, diabetes, autoimmune disease, rean lattery stenosis, interstitial nephritis, glomerulonephritis, polycystic kidney disease, cataract, Alzheimer's disease, acoustic trauma, cancer, infertility,

Sequence 337 AA;

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Gaps
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100.0%; Score 1771; DB 5; Length 337; 100.0%; Pred. No. 1.1e-194;
                                Indels
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                              0; Mismatches
Query Match 100.0
Best Local Similarity 100.0
Matches 337; Conservative
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The present specifically claimed sequence represents a human purinergic-related G-protein coupled receptor (GPCR) encoded by a gene on chromosome 13. GPCRs constitute a major class of proteins responsible for signal transduction within a cell. Upon binding of a ligand to the extracellular portion of a GPCR, a signal is transduced resulting in a biological or physiological change within the cell. The GPCR proteins can be divided into five families, family I contains the purinergic GPCRs (e.g. the P2Y receptors). P2Y receptors are characterised by their selective responsiveness towards ATP and its analogues, some also respond to UTP. The invention comprises a human G-protein coupled receptor protein and
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                                                           KWRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSS 120
                                                                                             KMRPWKSSTIIMLNLACTDLLYLTSLPFLHYYASGENWIFGDFMCKFIRFSFHFNLYSS 120
                                                                                                                                   ILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVACAVVWIISLVAVIPMTFLITSTNRTNR 180
                                                                                                                                                                     121 ILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVACAVVWIISLVAVIPMTFLITSTNRTNR 180
Novel isolated G-protein coupled receptor peptide useful for treating disorder characterized by absence of, in appropriate or unwanted expression of the receptor protein, and as immunogens to raise
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Human; chromosome 13; purinergic GPCR; G-protein coupled receptor; signal transduction; human protease; GPCR disorder; gene therapy; transgenic animal; receptor.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           N-PSDB; AAK98323, AAK98324.
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encoding nucleic acids. The GPCR protein and nucleic acids of the invention are useful in the treatment of a disease or condition mediated by a human protease. The GPCR protein of the invention is useful for: the development/identification of therapeutic proteins; assays designed to quantitatively determine levels of the protein in biological fluids; interaction of the GPCR and a molecule with which it normally interacts; and treating a disorder characterised by an absence of, or inappropriate expression of the GPCR protein. The GPCR nucleic acids of the invention are useful in diagnostic assays to identify changes in the GPCR nucleic acid that lead to pathology; controlling GPCR expression; and in gene therapy to treat patients with aberrant GPCR gene expression; and in gene herapy creat patients with aberrant GPCR gene expression. The GPCR nucleic acids can also be used in the production of transgenic animals
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         1 MNEPLDYLANASDFPDYAAAFGNCTDENIPLKMHYLPVIYGIIFLVGFPGNAVVISTYIF
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0
                                                                                                                                                                                                                                                                                                                                                                        100.0%; Score 1771; DB 5; Length 337; 100.0%; Pred. No. 1.1e-194; tive 0; Mismatches 0; Indels 0;
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337; Conservative
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                                                                                                                                                                                                                                                                                                                               Sequence 337 AA;
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10-AUG-2001; 2001WO-EP009243.

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The invention relates to a purified human P2Y1-like G protein-coupled receptor (GPCR) polypeptide and the nucleic acids encoding it (including 5° and 3 sequences, promoters, fragments, variants, or a sequence encoding a protein at least 50% identical to the GPCR). Also included are encoding a protein at least 50% identical to the GPCR, a sequence on expression vector comprising the nucleic acid, a host cell containing the vector and the identification of modulators of the GPCR sepecially the GPCR. The mucleic acid is useful for detecting a polynucleotide encoding the GPCR in a biological sample. The GPCR and nucleic acid are useful for screening for agents which decrease the activity of the GPCR and for modulators of the GPCR. The GPCR and nucleic acid are useful for modulating the activity of P2Y1-like G modulator or agent useful for modulating the activity of P2Y1-like G protein-coupled receptor in a disease such as bacterial, fungal, protein-coupled receptor in a disease such as bacterial, fungal, protein-coupled receptor in a disease, acute heart failure, hyporension, hypertraphy, psychotic and neurological disorders, mycardial infarction, under, inflammation, allergy, multiple sclerosis, disparences and proteins mycardial mericing prostatic hypertrophy, psychotic and neurological disorders, mycardial mericing protein or hypertrophy, psychotic and neurological disorders, mycardial mericing protein mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mericing mycardial mer
                                                                                                                                                                                                                                                                                                                                                               Novel human P2Y1-like G protein-coupled receptor polypeptide which can be regulated for treating infection, pain, cancer, diabetes, anorexia, asthma, hypertension, neurological disorder and dyskinesia.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 disorders such as Parkinson's disease, anxiety, schizophrenia, manic depression, delirium, dementia, severe mental retardation, Huntington's disease and Tourette's syndrome. The present sequence represents the P2Y1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 25; Fig 2; 118pp; English
                                  14-AUG-2000; 2000US-0224989P.
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                                                                                                        (FARB ) BAYER AG.
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Sequence 337 AA;

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                                                                                                         1 MNEPLDYLANASDFPDYAAAFGNCTDENIPLKOHTYLPVIYGIIFLVGFPGNAVVISTYIF
                                                                                  1 MNEPLDYLANASDFPDYAAAFGNCTDENIPLKMHYLPVIYGIIFLVGFPGNAVVISTYIF
                                                                                                                                                                KMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSS
                                                                                                                                                                                            KMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSS
                                                                                                                                                                                                                                               ILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVACAVVWIISLVAVIPMTFLITSTNRTNR
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                                                Gaps
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    Length 337;
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Query Match 100.0%; Score 1771; DB 5; Best Local Similarity 100.0%; Pred. No. 1.1e-194; Matches 337; Conservative 0; Mismatches 0;
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9 9 121 ILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVACAVVWIISLVAVIPWTFLITSTNRTNR 180

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AAE21803 standard; protein; 337 AA.

RESULT 8 AAE21803 œ

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The invention relates to an isolated AXOR89 polypeptide (G-protein coupled receptor) and its polymuclectide. The novel AXOR89 polypeptide and polymuclectide encoding the polypeptide, is useful for identifying agonists and antagonists (or inhibitors) that are potentially useful in treating conditions associated with an AXOR89 imbalance, such as bacterial, fungal or protozoan infections, cancers, pain, asthma, Parkinson's Disease, diabetes, obesity, anorexia, bulimia, acute heart failure, hypotension, hypertension, urinary retention, osteoporosis, angina pectoris, myocardial infarction, stroke, ulcers, allergies, benign prostatic hypertrophy, migraine, vomitting, psychotic and neurological disorders, anxiety, schizophrenia, manic depression, delirium, dementia, dystinesias, such as Huntington's Disease or dilles dela Tourette's syndrome. The polymucleotide sequence may also be used for chromosome localisation or tissue expression studies. The AXOR89 is used as a
                                                                                                                                                                 infection; cancer; pain; asthma; parkinson's Disease; diabetes; obesity; anovexia; bulinda; acute heart failure; hypotension; hypertension, ulcer; stroke; urinary retention; osteoporosis; angina pectoris; schizophrenia; myocardial infarction; allergy; benign prostatic hypertrophy; migraine; vonitting; psychotic; neurological disorder; anxiety; manic depression; delirium; Huntington's Disease; Gilles dela Tourette's syndrome;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Novel AXOR89 polypeptide and polynucleotide encoding it, useful for identifying agonists and antagonists in the treatment of diseases associated with an AXOR89 imbalance, such as cancers, diabetes or asthma.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            61 KMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSS 120
                                                                                                                                                   Human; AXOR89 polypeptide; G-protein coupled receptor; vaccine; receptor;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               1 MNEPLDYLANASDFPDYAAAFGNCTDENIPLKMHYLPVIYGIIFLVGFPGNAVVISTYIF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ;
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                                                                                                        Human AXOR89 (G-protein coupled receptor) protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Claim 1; Page 30; 37pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (SMIK ) SMITHKLINE BEECHAM CORP. (SMIK ) SMITHKLINE BEECHAM PLC.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                               10-MAY-2001; 2001GB-00011437.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          11-MAY-2000; 2000US-00569137.
                                                               (first entry)
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Matches 337; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Elshourbagy N, Shabon U;
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                      AAE21803;
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MNEPLDYLANASDFPDYAAAFGNCTDENIPLKMHYLPVIYGIIFLVGFPGNAVVISTYIF

KMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFWCKFIRFSFHFNLYSS ILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVACAVVWIISLVAVIPMTFLITSTNRTNR

KWRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSS

240 180

SACLDLTSSDELNTIKWYNLILTATTFCLPLVIVTLCYTTIIHTLTHGLQTDSCLKQKAR

RLTILLLLAFYVCFLPFHILRVIRIESRLLSISCSIENQIHEAYIVSRPLAALNTFGNLL

LYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP 337 LYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP 337

300

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241 RLTILLLLAFYVCFLPFHILRVIRIESRLLSISCSIENQIHEAYIVSRPLAALNTFGNLL 300
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                                                                                                                      241 RLTILLLLAFYVCFLPFHILKVIRIESRLLSISCSIENQIHEAYIVSRPLAALNTFGNLL 300
ILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVACAVVWIISLVAVIPMTFLITSTNRTNR 180
                                                                                                                                                                                                                                                                                                                                                                                                                                   Human, GPCR, G protein coupled receptor; signal transduction; olfactory; drug development; gustatory; taste; fragrance; receptor.
                                SACLDLTSSDELNTIKWYNLILTATTFCLPLVIVTLCYTTIHTLTHGLQTDSCLKQKAR
                                                  SACLDLISSDELNTIKWYNLILIATTFCLPLVIVTLCYTTIHTLIHGLQTDSCLKQKAR
                                                                                                   RLTILLLLAFYVCFLPFHILRVIRIESRLLSISCSIENQIHEAYIVSRPLAALNTFGNLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Database global search for G protein-coupled receptors, proteins encoded genes for studying in vivo signal transduction mechanism
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           100.0%; Score 1771; DB 5; Length 337; 100.0%; Pred. No. 1.1e-194; ive 0; Mismatches 0; Indels 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Claim 10; SEQ ID NO 14; 97pp + Sequence Listing; Japanese
                                                                                                                                                                        LYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP 337
                                                                                                                                                                                                       301 LYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            identifying targets for drug development.
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                                                                                                                                                                                                                                                                                                                                                                                                    Human GPCR polypeptide SEQ ID NO 14.
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                                                                                                                                                                                                                                                                                                ABP95602 standard; protein; 337
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Takeda S, Mitaku S;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30-JUL-2001; 2001WO-IB001446.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                04-AUG-2000; 2000JP-00237818.
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N-PSDB; ABZ42876.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Homo sapiens
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The invention comprises the amino acid and coding sequence of a human G protein-coupled receptor. The DNA and protein sequences of the invention are useful for developing drugs to prevent or treat (gene therapy): central nervous system diseases, endocrine diseases, metabolic diseases; cancer; respiratory diseases; digestive diseases; immune diseases; infilammations, infections, and circulatory diseases. The present amino acid sequence represents the human G protein-coupled receptor of the
                                                                                                                                Human; gene therapy; G protein-coupled receptor; drug development; central nervous system disease; endocrine disease; metabolic disease; cancer; respiratory disease; disease; inflammation; infection; circulatory disease.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    protein TGR30 and nervous diseases,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  Human kidney-originated G protein-coupled receptor protein TGR30 eencoded DNA, for developing drugs to treat central nervous diseasseendocrine diseases, metabolic diseases and cancer, including gene
                                                                                                                                                                                                                                                                                                                                                                                                                                    Ito T, Shintani Y, Miyajima N;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Claim 1; Page 88-90; 98pp; Japanese.
                                                                                                  Human G protein-coupled receptor.
AAO15399 standard; protein; 337
                                                                                                                                                                                                                                                                                                                      17-JAN-2002; 2002WO-JP000270.
                                                                                                                                                                                                                                                                                                                                               18-JAN-2001; 2001JP-00010714.
30-MAR-2001; 2001JP-00102484.
                                                                                                                                                                                                                                                                                                                                                                                                   (TAKE ) TAKEDA CHEM IND LTD.
                                                                 (first entry)
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                                                                                                                                                                                                                   Homo sapiens.
                                                                 27-SEP-2002
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                                AA015399;
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Sequence 337 AA;

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1 MNEPLDYLANASDFPDYAAAFGNCTDENIPLKMHYLPVIYGIIFLVGFPGNAVVISTYIF

100.08; P1.

Matches 337; Conservative

Local Similarity

Query Match

sequence is that of P2Y1li

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                                                                                                                                                                                              121 ILFLICESIFRYCVIIHPMSCFSIHKTRCAVVACAVVWIISLVAVIPMTFLITSTNRTNR
                                                                                                                                                                                                                                                        SACLDLISSDELNTIKWYNLILTATTFCLPLVIVTLCYTTIIHTTHGLQTDSCLKQKAR
                                                                               1 MNEPLDYLANASDFPDYAAAFGNCTDENIPLYMHYLPVIYGIIFLVGFPGNAVVISTYIF
                                                         1 MNEPLDYLANASDFPDYAAAFGNCTDENIPLKMHYLPVIYGIIFLVGFPGNAVVISTYIF
                                                                                                                    KMRPWKSSTIIMLNLACTDLLYLTSLPPLIHYYASGENWIFGDFMCKFIRFSFHFNLYSS
                                                                                                                                              KMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSS
                                                                                                                                                                             ILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVACAVWIISLVAVIPMTFLTTSTNRTNR
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                               Gaps
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Length 337;
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             1.1e-194;
 DB 5;
100.0%; Score 1771;
100.0%; Pred. No. 1.1
                             0; Mismatches
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                               Conservative
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N-PSDB; ABL56197.
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(BOEN/) BOENISCH H.
            Best Local Similarity
Matches 337; Conserv
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                                                                                                                                                                                                                                                                                                                       241 RLTILLLAFYVCFLPFHILRVIRIBSRLLSISCSIENQIHEAYIVSRPLAALNTFGNLL 300
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Human, G-protein coupled receptor, GPCR; PFI-019; neuroprotective; anti-inflammatory, cytostatic; cardiovascular; antiallergic; hypotensive; antiarteriosclerotic; osteopathic; hypertension; asthma;
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                                                                                                   61 KMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFWCKFIRFSFHFNLYSS
                                                                                                                                                                                                                      121 ILFLICESIFRYCVIIHPMSCFSIHKTRCAVVACAVWHIISLVAVIPMTFLITSTNRTNR
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                                                                             1 MNEPLDYLANASDFPDYAAAFGNCTDENIPLKMHYLPVIYGIIFLVGFPGNAVVISTYIF
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                        100.0%; Score 1771; DB 5; 100.0%; Pred. No. 1.1e-194;
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                                 100.0%; Pred. No. --
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Human G-protein coupled receptor PFI-019.
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04-MAY-2001; 2001GB-00011031.
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                                                    Matches 337; Conservative
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 (PFIZ ) PFIZER LTD (PFIZ ) PFIZER INC
                                       Local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    artherosclerosis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 N-PSDB; ABQ78847
Sequence 337 AA;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Homo sapiens.
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                        Query Match
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Claim 11; Fig 2; 19pp; English

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       61 KMRPWKSSTIIMINLACTDLLYLTSLPFLIHYYASGENWIFGDFWCKFIRFSFHFNLYSS 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        1LFLTCFSIFRYCV11HPMSCFSIHKTRCAVVACAVVWIISLVAVIPMTFLITSTNRTNR 180
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        RLTILLLLAFYVCFLPFHILRVIRIESRLLSISCSIENQIHEAYIVSRPLAALNTFGNLL 300
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                             the polymucleotide encoding it. The protein of the invention has neuroprotective, anti-inflammatory, cytostatic, cardiovascular, antiallergic, hypotensive, antiarteriosclerotic, and osteopathic activity. The GPCR polypeptide is useful for manufacturing a medicament for treating a patient who needs to upregulate a receptor. Preferably, therapeutically useful areas are hypertension, asthma, and artherosclerosis. The sequence represents the G-protein coupled receptor of the invention, PFI-019
                                                                                                                                                                                                                                                                                                                                                        MNEPLDYLANASDFPDYAAAFGNCTDENIPLKMHYLPVIYGIIFLVGFPGNAVVISTYIF 60
                 invention relates to a novel G-protein coupled receptor (GPCR), and
                                                                                                                                                                                                                                                                                                                       MNEPLDYLANASDFPDYAAAFGNCTDENIPLKMHYLPVIYGIIFLVGFPGNAVVISTYIF
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2001US-0272929P.
2001US-0274864P.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              (first entry)
                                                                                                                                                                                                                                                                                 337; Conservative
                                                                                                                                                                                                                                                              Similarity
                                                                                                                                                                                                        Sequence 337 AA;
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30-JAN-2001; 2
02-MAR-2001; 2
09-MAR-2001; 3
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Best Local 2
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                                                                                                                                                                                                                                                                                                                                                                                        The invention relates to human novel polynucleotides and polypeptides. The sequences are useful for the treatment, prevention and diagnosis of disorders such as trauma, viral/parasitic/bacterial infections, Alzheimer's disease, Huntington's disease, Parkinson's disease, behavioural disorders, anxiety, addiction, pain, hair growth diseases, alopecia, pigmentation disorder, inflammatory disorders such as osteonand rheumatoid arthritis, inflammatory bowel disease, Crohn's disease, acquired immunodeficiency syndrome (AIDS), cancers such as colon cancer and ademocarcinoma, askhma, hypertension, autoimmune disease, clabetes, obesity, graft versus host disease, ulcer, bulimia, anorexia and demontia. Sequences ABG70285-ABG70305 represent human novel polypeptides
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                                                                                                                                                                      Edinger S;
                                                                                                                                                                                                                                                                                       Novel polypeptide, designated NOVX for treating or preventing disorders or symptoms e.g. trauma, Alzheimer's disease, cancers, acquired immunodeficiency syndrome, asthma and rheumatoid arthritis.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        61 KMRPWKSSTIIMLNLACTDLLYLTSLPFLIHYYASGENWIFGDFMCKFIRFSFHFNLYSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    121 ILELTCESIFRYCVIIHPMSCESIHKTRCAVVACAVWIISLVAVIPMTELITSTNRTNR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              1 MNEPLDYLANASDFPDYAAAFGNCTDENIPLKMHYLPVIYGIIFLVGFPGNAVVISTYIF
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          181 SACLDLTSSDELNTIKWYNLILTATTFCLPLVIVTLCYTTIIHTLTHGLQTDSCLKQKAR
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                                                                                                                                                                       Burgess CE,
                                                                                                                                    r RA, Guo X;
Zerhusen BD;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Indels
                                                                                                                                      Spytek KA, Ballinger RA,
Li L, Bilerman KE, Zerhus
Boldog F, Gusev VY, Burg
M, Gunther E, Smithson G,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 301 LYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP 337
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2001US-0276688P.
2001US-0277880P.
2001US-0286409P.
2001US-0309246P.
2001US-0315600P.
                                                                                                                                        Colman SD, Spy
Shenoy SG, Li
Casman SJ, Bo
Malyankar UM,
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                                                                                                      (CURA-) CURAGEN CORP.
                                                                                                                                                                                                                                         WPI; 2002-590743/63.
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                                                                                                                                                                                                                                                           N-PSDB; ABS51730.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   the invention
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                                                                                                                                                                      Patturajan M,
Gangolli EA,
                                                                                                                                        Shimkets RA,
Tchernev VT,
                   22-MAR-2001;
25-APR-2001;
   16-MAR-2001;
                                                     31-JUL-2001;
                                                                      29-AUG-2001;
                                                                                                                                                                                                       Gerlach VL;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   SACLDLTSSDELNTIKWYNLILTATTFCLPLVIVTLCYTTIIHTLTHGLQTDSCLKQKAR 240
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     New G-protein coupled receptor polypeptides designated TGR2, TGR38, TGR118, TGR364, TGR343 and TGR358, useful as targets for screening drugs for treating or preventing e.g. asthma, multiple sclerosis, stroke or nephrolithiasis.
                                                                                            TGR358; antiasthmatic; neuroprotective; cerebroprotective; nephrotropic; anticonvulsant; hypotensive; hepatotropic; dermatological; human; immunosuppressive; antiinflammatory.
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                                                                            G-protein coupled receptor; GPCR; TGR2; TGR38; TGR118; TGR164; TGR343;
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                                                                                                                                                                                                                                                                                                                                                                                                  Zhao J, Cutler
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                                                                                                                                                                                                                                                                                    01-JUL-2002; 2002WO-US020860.
                                                                                                                                                                                                                                                                                                                       03-JUL-2001; 2001US-0302800P.
(first entry)
                                                                                                                                                                                                                                                                                                                                                                                                  Dai K, Chen J,
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                                     Human TGR164 protein.
                                                                                                                                                                                                                                                                                                                                                                                                                                      WPI; 2003-210368/20.
N-PSDB; ABZ59170.
                                                                                                                                                                                                                                                                                                                                                             (TULA-) TULARIK INC.
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Matches 337; Conserv
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                                                                                                                                                                                                           WO2003004678-A2
                                                                                                                                                                         Homo sapiens.
 28-APR-2003
                                                                                                                                                                                                                                                16-JAN-2003.
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virucide; fungicide; antibacterialc; cytostatic; analgesic; antidiabetic; annotectic; cardiant; hypotensive; osteopathic; antianginal; antiarteriosclerortic; cerebroprotective; anti-ulcer; antiallergic; nootropic; neuroprotective; antiparkinsonian; G-protein coupled receptor; GPCR; viral; fungal; bacterial infection; immune-related disorder; cancer; pain; diabetes; obesity; anorexia; acute heart failure; hypertension; osteoporosis; angina pectoris; attensoclerosis; stroke; ulcer; allergy; psychotic neurological disorder; schizophrenia; dementia; degenerative disease; Parkinson's; Alzheimer's; dyskinesia; Huntington's; human; GPCRx10; purinergic receptor P2Y; chromosome 13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     The invention relates to a novel G-protein coupled receptor (GDCR). The receptor, polynuclectide, agonist, reverse agonist and antagonist of the invention may be useful for treating receptor—mediated disorders including viral, fungal or bacterial infections, immune-related disorders such as cancer, pain, diabetes, obesity, anorexia, acute heart failure, hypertension, osteoporosis, angina pectoris, atherosclerosis, stroke, ulcer and allergy, as well as psychotic and neurological disorders such as schizophrenia and dementia, degenerative diseases such as Parkinson's disease and Alzheimer's disease and dyskinesias such as Huntington's
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             disease. The current sequence is that of the human purinergic receptor P2Y-related GPCRx10 alternative protein of the invention which is encoded by DNA located on chromosome 13.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         New human G-protein coupled receptor, useful for treating receptor-
mediated disorders, e.g. infections, cancer, pain, diabetes, obesity,
acute heart failure, osteoporosis, stroke, ulcer, allergy, or
                                                                                                                                                                                                                                          Human purinergic receptor P2Y-related GPCRx10 alternative protein.
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301 LYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP
                               301 LYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Govaerts C,
                                                                                                                               ADC26010 standard; protein; 337 AA.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Claim 6; Page 15; 24pp; English.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          20-JUN-2000; 2000US-0212908P.
05-DEC-2000; 2000EP-00870289.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        21-JUN-2001; 2001US-00885453
                                                                                                                                                                                                      (first entry)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  neurological disorders.
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PARMENTIER M.
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LANNOY V.
GOVAERTS C
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           DETHEUX M.
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                                                                                                              ADC26010
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0;

Gaps

0;

Indels

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Length 337;

100.0%; Score 1771; DB 7; 100.0%; Pred. No. 1.1e-194;

0; Mismatches

Best Local Similarity 100. Matches 337; Conservative

Query Match

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0y 1 WIREPLOYLANASDPPDYAAAFGNCTDENIPLKWHYLEVIYGIIFLVGFEGNAVVISTYIF 60
1 MAREPLOYLANASDPPDYAAAFGNCTDENIPLKWHYLEVIYGIIFLUGFEGNAVVISTYIF 60
0y 61 KMRPWKSSTIIMLNIACTDLLYLTSLEFLIHYYASGENWIFGDEMCKFIRFSBHENLYSS 120
0y 121 ILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVACAVWMISLYBHTFLITSTNRTNR 180
0y 121 ILFLTCFSIFRYCVIIHPMSCFSIHKTRCAVVACAVWMISLVAVIPMTFLITSTNRTNR 180
0y 181 SACLDLTSSDELNTIKWYNLILTATTFCLPLVIYTLCYTTIIHTLTHGLOTDSCLKOKAR 240
0y 181 SACLDLTSSDELNTIKWYNLILTATTFCLPLVIYTLCYTTIIHTLTHGLOTDSCLKOKAR 240
0y 241 RLTILLLIAFYVCFLPFHILRYIRIESRLLSISCSIENQIHEAYIVSRPLAALNTFGNLL 300
0y 241 RLTILLLIAFYVCFLPFHILRYIRIESRLLSISCSIENQIHEAYIVSRPLAALNTFGNLL 300
0y 301 LYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP 337
0b 301 LYVVVSDNFQQAVCSTVRCKVSGNLEQAKKISYSNNP 337
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